TOWARDS A SUSTAINABLE APPROACH

Natural Resource Development and Environmental Protection in the Northwest Territories

Background Study prepared for the N.W.T. Legislative Assembly's Special Committee on the Northern Economy

Northwest Territories

TOWARDS A SUSTAINABLE APPROACH

Natural Resource Development and Environmental Protection
in the Northwest Territories

May, 1989

A Background Study for the
Special Committee on the Northern Economy
of the
Legislative Assembly of the Northwest Territories

by

Zella Osberg and Stephen Hazell
P.O. Box 4128
Station C
Ottawa, Ontario
K1Y 4P3

90-02637/

This Background Study is one of several prepared for the Special Committee on the Northern Economy. It is being released in the hope that it will be widely circulated and discussed.

The findings of this report are the personal responsibility of the author and do not necessarily reflect the views of the Special Commmittee on the Northern Economy.

May, 1989

CONTENTS

Summary and Inuktitut Translation ..... (a)

Executive Summary ..... (i)

Introduction 1

I. Challenges 5

Constraints on Development; Growing Needs 5
Competing Visions 8
Increasing Authority -- Increasing Control? 11

II. Meeting Present and Future Needs 18

Sustainable Development 19
Goals of Sustainable Development 21
Guiding Principles for Achieving Sustainable Development .. 24

III. Strategies for the Special Committee on the Northern Economy 30

Supporting Current Initiatives 32
Creating Incentives 33
Integrating Management 34
Keeping Watch 35
Summary of Recommendations 36

APPENDICES

Appendix A: Terms of Reference 39
Appendix B: Selected Bibliography 41
Appendix C: Consultations 46

SUMMARY

(Prepared by Project Staff)

INTRODUCTION

Purpose

The Special Committee on the Northern Economy asked the consultants, Zella Osberg and Stephen Hazell, to do a study showing how best to develop the NWT's natural resources while protecting the environment. This report describes the approach the consultants recommend.

The report is divided into three parts.

The first part talks about the challenges facing the NWT as it tries to develop the Territories' natural resources while, at the same time, protecting the environment.

The second part describes the concept of sustainable development: a way of developing resources while protecting the environment for future generations.

The third part contains recommendations. It shows how the GNWT can use the concept of sustainable development to help develop the economy in an intelligent way: by supporting current initiatives, creating incentives, integrating management, and developing greater accountability.

How the Study was done

The consultants gathered information by reading reports, studies, and government documents. They also interviewed people working with the Federal and Territorial governments, native organizations, resource industries, and environmental organizations. Once they had gathered their information they wrote the report.

1. CHALLENGES

Constraints

The future economic development of the NWT is closely tied to how it uses its natural resources--both the non-renewable resources (gas ,oil, and minerals), and its renewable resources (wildlife, fisheries, forests). But there are important economic and environmental constraints.

Because of its isolation and other factors, northern resources are expensive to develop. They are subject to fluctuations in world markets and the influence of various social forces (e.g. animal rights groups).

There are environmental constraints: pollution, the limited quality and quantity of habitats, and the slow rate of growth in the cold, northern climate.

Modern industry has created environmental problems: oil spills, the depletion of the ozone layer, the contamination of whale and seal meat by PCBs.

There is an increasing demand for the NWT's resources. The NWT population is growing at a significant rate. More people mean a greater demand on local water and food supplies; energy consumption will increase as will garbage and industrial waste.

Competing Visions

People have different ideas about how the NWT should be developed.

At one extreme are those who see the NWT as the last, untamed wilderness. Traditionally they have opposed most development.

At the other extreme are those who see the NWT as a vast supply of natural resources that should be developed.

In 1977 Mr. Justice Tom Berger described the debate as one between those who saw the North as a homeland, and those who saw it as a frontier.

In the past, the competing visions have done battle during environmental hearings for resource development projects. But these regulatory hearings are not a good forum to discuss the broader, longer-term implications of development.

Better ways are being developed.

Land use planning (such as the proposed Lancaster Sound Plan) helps interested parties decide on priorities well in advance of development. The creation of regional bodies and more emphasis on local communities helps provide better input from the regional and local level. The establishment of resource management boards and councils under land claim agreements will provide additional opportunities for aboriginal peoples to make their influence felt.

The GNWT needs a long-term economic development strategy to help reconcile competing visions of development.

Existing Authority

THE FEDERAL GOVERNMENT is the "landlord of the North" with authority over 97% of all lands. Its authority extends over the use of Crown Lands, mining activities, uses of water, oil and gas development.

Through legislation the Federal government controls: seacoast and inland fisheries, protection of fish habitat, the hunting of migratory birds, the import, manufacture and use of toxic chemicals.

It also has authority over energy exports, piplines, setting standards for shipping in Arctic Waters, negotiating international agreements on such things as acid rain and the migration of caribou across international boundaries.

THE GOVERNMENT OF THE NORTHWEST TERRITORIES is responsible for wildlife, forests, management of Commissioner's lands, and environmental protection. It also assists federal authorities in managing resource development and environmental protection. The key departments are: Renewable Resources, the Department of Energy, Mines, and Resources, the Department of Economic Development and Tourism.

GNWT legislation cannot conflict with federal legislation and has limited application within the NWT.

Regulatory Complexities: Environmental Impact Reviews.

There are a number of different regulations and regulating bodies. Industry has complained that there are duplications, inconsistent applications of policies, and administrative complications. It has advocated the streamlining of the process and a "single window" approach.

Evolving Authority

The GNWT is currently negotiating the devolution of more authority from the Federal government.

The Agreement in Principle for the Northern Accord provides for the transfer of significant authority for oil and gas development to the GNWT and provides the GNWT with a share of revenues. However, prospects for achieving a complete array of provincial-type powers--and financing--are slim.

Whatever additional powers the GNWT receives from the Federal government will be authority shared with native organizations.

There is a real concern that this will lead to further duplication in the management and development of resources.

The GNWT must take a lead role in developing a coordinated approach.

2. MEETING PRESENT AND FUTURE NEEDS

Sustainable Development

Since 1980, the concept of sustainable development has been receiving more and more attention. There is a great deal of discussion over what the term "sustainable development" actually means. It seems to mean finding ways of developing resources in in a manner that meets the needs of the present generation without compromising the ability of future generations to meet their needs.

Goals of Sustainable Development

For RENEWABLE RESOURCES the goals are:

1. Maintaining essential ecological processes and life-support systems (by not irreversibly disrupting climate, ozone layer, forests)

2. Preserving genetic diversity (by preventing species extinctions and protecting healthy gene pools within species).

3. Sustainable utilization of species and ecosystems (by harvesting within the limits of production capacity.)

For NON-RENEWABLE RESOURCES the goals are:

1. Maximizing long-term as well as short-term benefits to communities affected and involved with resource use and development.

2. Conservation of non-renewable resources through energy efficient technologies and practices.

3. Increased recycling and re-use of mineral resources and industrial wastes.

4. Elimination of adverse impacts in exploration, extraction, production, processing and transportation of oil, gas, and mineral resources and products.

Government and some resource industries (especially mining companies) are beginning to translate some of these principles into practice.

Guiding Principles For Achieving Sustainable Development

The concept of Sustainable Development must be adapted to the needs of different sectors, regions and communities. The consultants have provided four guiding principles.

1. RECOGNIZE THE ENVIRONMENTAL IMPLICATIONS OF ECONOMIC POLICIES AND STRATEGIES. Because of the close link between the economy and the environment, economic and environmental policies cannot be developed in isolation from one another.

2. **EMPLOY CROSS-SECTORAL APPROACHES TO OVERCOME INSTITUTIONAL OBSTACLES. On page 26 of this report the consultants provide a series of questions that decision-makers should ask of one another as they decide on development initiatives.**

3. OBTAIN THE BEST INFORMATION. It is critical that policy makers have at their disposal the best and most current information for decision-making.

4. RESPECT COMMUNITY INTERESTS AND PRIORITIES. It is the local people who must live with the consequences of the decisions that are made. Local and regional goals must be established to create a framework for decision-making.

3. STRATEGIES FOR THE SPECIAL COMMITTEE ON THE NORTHERN ECONOMY

In this final section the consultants provide fifteen specific recommendations. Most of these are built around four specific strategies: support current initiatives; create incentives; integrate management; and keep watch.

Recommendations

The Special Committee should:

1. Adopt the goals and principles of sustainable development and incorporate these goals and principles into the Committee's long-term economic development strategy.

SUPPORTING CURRENT INITIATIVES

The Special Committee should:

2. Support the implementation of existing sectoral and regional conservation strategies in the NWT and the development of new such strategies.

3. Recommend the early appointment of the GNWT Round Table on environment and economy.

4. Support business and industry initiatives that further sustainable development goals and principles.

CREATING INCENTIVES

The Special Committee should:

5. Recommend that the GNWT conduct a comprehensive review of all incentives programs (internal and external) that affect natural resource development in the NWT for compatability with sustainable development goals.

6. Recommend that following such a review, the GNWT support elimination of incentives identified as inhibiting sustainable development and/or replacement with incentives supporting sustainable development.

7. Recommend that the GNWT systematically encourage industry and other natural resource users to adopt sustainable practices through incentives and discourage unsustainable practices through disincentives.

8. Recommend that the GNWT review its internal procurement and energy and waste management policies for compatability with sustainable development goals and principles.

INTEGRATING MANAGEMENT

The Special Committee should

9. Recommend that the mandates of all departments include sustainable development goals and that each department periodically evaluate its progress in achieving sustainable development against these stated goals.

10. Recommend that the Deputy Minister of the Executive Council be directed to ensure that all economic policy and program initiatives and related legislation submitted to the Executive Council for decision are consistent with sustainable development goals and that consideration be given to establishing a small secretariat reporting to the Deputy Minister of the Executive Council to perform this role.

11. Recommend that the GNWT develop a comprehensive northern-based environmental information system designed to assist the GNWT and other decision-makers in the NWT assess the sustainability of resource development policies, programs and projects.

12. Support the further development of the GNWT's role as coordinator of resource development and environmental protection regulatory and information requirements for the NWT.

KEEPING WATCH

The Special Committee should:

13. Recommend that an environmental auditing system similar in principle to existing financial auditing systems be established within the GNWT.

14. Recommend that the GNWT enact legislation authorizing the Legislative Assembly to appoint an Environmental Advisor to report directly to the Legislative Assembly to ensure public accountability for the management of natural resources and protection of the environment within the NWT.

15. Recommend that the GNWT develop public education programs respecting the goals and practices of sustainable development.

ᓇᐃᓪᓕᒋᐊᕐᓯᒪᔪᖅ

(ᐱᓕᕆᐊᖃᑦᑐᓄᑦ ᐋᖅᑭᒃᓱᑦᑕᐅᔪᕕᓂᖅ)

ᐱᒋᐊᓐᓂᖓ

ᐱᔾᔪᑎᖓ

ᑲᑎᒪᔨᕋᓛᖑᑲᐃᓐᓇᕐᑐᑦ ᐅᑭᐅᑦᑕᕐᑐᒥ ᒪᑭᒪᔾᔪᑎᔅᓴᑦ ᐱᔾᔪᑎᒋᑉᓗᒋᑦ ᐊᐱᕆᓚᐅᕐᑐᑦ ᐅᖃᐅᔾᔪᐃᔨᓂᒃ, Zella Osberg and Stephen Hazell-ᓂᒃ ᖃᐅᔨᓴᐃᕐᓗᒋᑦ ᖃᓄᖅ ᐱᐅᓛᕐᓇᓪᓕᕐᒪᖔᑦ ᓄᓇᑦᑎᐊᕐᒥ ᐱᔨᑦᑐᑦᑐᖃᐃᑦ ᓯᕐᓯᓯᕐᒪᔾᔪᑦᑐᑦ ᕐᓴᕐᐸᑦᓕᐊᑎᑕᐅᔪᓐᓇᕐᒪᖔᑕ ᓴᐳᓐᓂᐊᑦᑕᐅᑎᑦᓗᒍ ᐊᕙᓗᒥᐅᑕᕆᔭᐅᔪᖅ. ᑖᓐᓇ ᐅᒃᓂᖅᓯᕐᒪᔪᖅ ᓇᓗᓇᐃᕐᓯᒋᐊᕐᓗᖅ ᐅᖃᐅᔾᔨᒋᐊᕐᑎᑦ ᐃᓕᖅᑯᓯᕆᕐᓗᒍ ᐊᑐᓕᕐᓯᔭᖓᓐᓂᒃ.

ᐅᓂᖅᑕᐅᔪᖅ ᐊᑦᒍᑦᑕᐅᓯᒪᕗᖅ ᐱᖓᓯᐃᓕᖓᔭᐅᑦᓗᓂ.

ᓯᕗᑦᓕᖅ ᐅᓂᖅᑲᓂᐊᕐᖅ ᓄᓇᑦᑎᐊᑦᒧᑦ ᓴᖓᔪᓂᒃ ᓄᓇᑦᑎᐊᕐᒥ ᐱᔾᑦᑐᖃᑦᓂᒃ ᕐᓴᕐᐸᑦᓕᐊᑎᑦᑎᔪᑕᐅᓇᓱᒃᑐᑦ ᐱᓕᕆᐊᕐᓴᑎᑦᓕᒋᑦ ᓴᖓᔭᐅᔪᓂᒃ, ᐊᒻᒪ ᑕᐃᒪᓐᓇᐃᑲᓗᐊᑦᓗᑎᒃ ᐊᑕᐅᑦᑎᒃᑯᑦ ᓴᐳᓐᓂᐊᑦᑕᐅᓇᓱᒃᑎᑦᓗᒍ ᐊᕙᓗᒥᐅᑕᖓᑦ.

ᑐᒃᓕᖓ ᐅᓂᖅᑲᓴᖃᑦᑐᖅ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑕᐅᓂᐊᑦᓗᑎᒃ ᐳᕈᑦᑕᑦᓕᐊᒃᔪᑕᐅᓇᓱᒃᑐᑦ: ᐱᕈᑦᑕᑦᓕᐊᒃᔪᓯᒃᓴᖅ ᐱᓕᕆᖅᕕᓴᓄᑦ ᐊᕙᓗᒥᐅᑕᐃᑦ ᓴᐳᓐᓂᐊᑦᑕᐅᑎᑦᓗᒋᑦ ᑭᖑᓂᓴᕗᑦ ᐃᓱᒪᒋᓗᒋᑦ ᐊᑐᖃᑦᑕᖃᔭᑦᓂᖔᑦ.

ᐱᖓᔪᐊᑦ ᐊᑐᓕᖑᔭᓕᐊᖑᔪᓂᒃ ᐃᓚᖃᐅᑦᑐᖅ. ᑕᑯᒃᓴᐅᑎᑦᑎᕗᖅ ᑲᓄᖅ ᓄᓇᑦᑎᐊᑦ ᒐᕙᒪᒃᑯᖔᑦ ᐊᑐᕈᓐᓇᕐᒪᖔᑕ ᐱᕈᑦᑕᑦᓕᐊᑎᑦᑎᔪᑎᖃᑦᓗᑎᒃ ᐃᑲᔪᑎᖃᕈᒪᓗᑎᒃ ᐋᖅᑭᐅᒪᑦᑎᐊᑦᑐᒃᑯᑦ: ᒫᓐᓇ ᐃᖔᑦᕋᔪᑦ ᐱᓕᕆᐊᖑᔪᑦ ᐃᑲᔪᑦᑐᑦᑕᐅᓗᑎᒃ, ᓴᖅᑭᑎᑦᑎᕙᓪᓕᐊᓗᑎᒃ ᑮᓇᐅᔭᓴᕈᑕᐅᒃᑲᓐᓂᕋᔭᑦᑐᓂᒃ, ᐃᓚᓕᐅᔭᐅᓯᒪᓗᓂ ᐊᐅᓚᑦᑎᓂᖅ, ᐊᒻᒪ ᓴᖅᑭᑦᑎᕙᓪᓕᐊᓗᑎᒃ ᓴᑕᐅᔪᓴᐅᓇᔭᑦᑐᓂᒃ.

ᖃᓄᖅ ᖃᐅᔨᓴᐃᔪᑦ ᖃᐅᔨᓴᐃᓚᐅᕐᒪᖔᑕ

ᐅᖃᐅᔾᔪᐃᔨᐅᔪᑦ ᑐᓴᒐᒃᓴᓂᒃ ᑲᑎᑦᑎᓚᐅᑦᑐᑦ ᐅᖃᓕᒫᖃᑦᑕᑦᓗᑎᒃ ᐅᓂᒃᑲᓂᒃ, ᖃᐅᔨᓴᑦᑕᐅᓂᑯᓂᒃ, ᐊᒻᒪ ᒐᕙᒪᒃᑯᑦ ᑎᑎᖃᐅᑎᖑᓐᓂᒃ. ᐅᖃᖃᑎᖃᖃᑕᓚᐅᕆᕗᑦ ᐃᖅᑲᓇᐃᔭᑦᑎᓂᒃ ᑲᓇᑕᐅᑦ ᒐᕙᒪᒃᑯᖔᓐᓂ ᓄᓇᑦᑎᐊᑦᓗ, ᖃᑦᓗᓈᖑᖔᑦᑐᑦ ᑲᑐᔾᔨᖃᑎᒌᖔᓐᓂᑦ, ᐱᓕᕆᖅᕕᓴᔪᐊᓂ, ᐊᒻᒪ ᐊᕙᓗᒥᐅᑕᓕᕆᓂᑦᒧᑦ ᑲᑐᔾᔨᖃᑎᒌᓂᒃ. ᑐᓴᒐᒃᓴᖔᑦ ᑲᑎᑕᐅᕐᓂᕐᒪᑕ ᐅᓂᒃᑲᒃᓴᖔᑦ ᓴᖅᑭᑕᐅᕙᓪᓕᐊᑦᓗᑎᒃ ᑎᑎᕋᑦᑕᐅᕙᓪᓕᐊᓚᐅᕐᑐᑦ.

1. ᓴᑕᐅᓯᒪᔪᑦ ᐱᔪᒥᓇᑦᑐᑦ

ᐊᑐᓗᐊᑦᑕᐃᓕᒪᓂᖅ

ᓯᕗᓂᒃᓴᓇᓂᐊᑦᑕᖓᑦ ᐱᓕᕙᓪᓕᐊᔪᓕᓇᓂᐅᑦ ᓄᓇᑦᑎᐊᒥ ᓴᖅᑭᒃᑦᑎᑕᐅᓂᐊᑦᑐᖅ ᒪᓕᒃᓗᒋᑦ ᐅᑦᓗᒥ ᐱᖑᑎᒋᔭᐅᔪᑦ --ᑕᒪᐃᓐᓂᒃ ᐱᕈᒃᑲᓐᓂᕈᓐᓇᖔᑦᑐᑦ (ᒫᒃ, ᐅᖅᓱᐊᓗᒃ, ᐊᒻᒪ ᐅᔭᕋᓐᓂᐊᒐᒃᓴᑦ) ᐱᕈᒃᑲᓐᓂᑦᑐᒃᑦᓗ (ᓂᑦᔪᑏᑦ, ᐃᖃᓗᐃᑦ, ᓇᑦᑐᒃᑦᓗ). ᑭᓯᐊᓂ ᐱᒻᒪᕆᐅᔪᓂᒃ ᐱᕙᓪᓕᐊᔪᓕᕆᓂᖅ ᐊᒻᒪ ᐊᕙᓗᒥᐅᑕᓕᕆᓂᑦᒧᑦ ᐊᑐᑦᓗᐊᑦᑕᐃᓕᒪᒋᐊᖃᑦᑐᑦ ᓄᖅᑲᖓᕈᑎᖃᑦᑐᑦ ᑕᒪᑐᒥᖓ ᐊᑐᑦᓗᐊᑦᑕᐃᓕᒪᒋᐊᖃᑦᓂᕐᒥᒃ.

ᐅᖓᓯᒃᑐᒦᓐᓂᖓ ᐊᓯᔾᔪᓪᓗ, ᐅᑭᐅᑦᑕᑐᒥ ᓱᓇᑐᐃᓐᓇᑦ ᐱᓕᕆᐊᕆᓇᓱᒃᓗᒋᑦ ᐊᑭᑐᔪᒻᒪᕆᐅᕗᑦ ᐱᕈᑦᑎᑉᐸᓪᓕᐊᓇᓱᒃᓗᒋᑦ. ᒪᓕᒃᑕᖃᐃᓐᓇᖃᑕᐅᕙᒪᑕ ᓱᓚᑦᔪᐊᕐᒥ ᓱᓇᑐᐃᓐᓇᑦᓂᒃ ᐱᓕᕆᔾᔪᓯᓂᒃ ᐊᑭᑦᑐᑉᐸᓪᓕᐊᓱᓂᒃ ᐊᑭᓗᒃᓯᒋᐊᓱᓂᒃ ᐊᒻᒪ ᐊᓯᔾᔪᑦ ᐃᒃᐱᒋᔭᐅᓕᖃᑕᐅᕙᒃᑭᑉᓗᑎᒃ ᐊᒃᓱᕈᑦᑐᑦ ᓱᖕᓗ ᑕᒪᒃᑯᐊ (ᐆᒃᑑᑎᒋᓗᒋᑦ ᓂᔪᑎᓂᒃ ᓇᒃᓕᓘᓱᒃᑏᑦ ᑲᑐᔾᖃᑎᒌᔾᔪᑦ).

ᐊᕙᓗᒥᐅᑕᓄᑦ ᐊᑐᓗᐊᑦᑕᐃᓕᒪᔭᐅᔪᑦ ᑕᐃᒪᐅᔾᒪᑕ: ᑐᒃᓇᑐᖃᓕᖃᑦᑕᑦᓂᖕ ᐋᓐᓂᐊᑦᓇᑐᖃᓕᖃᑦᑕᑦᓂᖕ, ᑭᒃᓕᖃᑦᓂᔾᔪᑦ ᐊᒥᒐᑦᓂᔾᔪᑦ ᓂᔪᑏᑦ, ᐊᒻᒪ ᓱᒃᑲᐃᑐᒥᒃ ᐱᕈᑦᑎᓕᐊᕙᓐᓂᔾᔪᑦ ᓂᒃᓚᓱᒃᑐᒥ ᐅᑭᐅᑦᑕᑐᑉ ᓱᓚᖓᓂ.

ᐅᑉᓗᒥᐅᓕᑦᑐᖕ ᐱᓕᕆᐊᖑᕙᒃᑐᑦ ᐊᕙᓗᒥᐅᑕᓄᑦ ᓈᒻᒪᔾᔪᑦᑐᓂᒃ ᓵᑦᑎᓱᒪᑎᑦᑎᓕᒪᑕ: ᐅᖕᓱᐊᓗᑉ ᑯᐊᓂᖓ, ᓄᓇᐅᑉ ᖑᓛᓂ ᐊᖓᔪᔪᐊᖕ ᐊᔾᒃᓕᕙᑦᓕᐊᓂᖓ, ᐋᓐᓂᐊᑦᓇᑐᑦᑖᑦᑎᑕᐅᓂᔾᔪᑦ ᕿᓇᓗᒃᑦ ᓇᑏᑦᓗ ᓂᕿᔾᔪᑦ ᐲᓱᐲᓂᒃ.

ᐊᑐᑦᑕᐅᕙᑦᓕᐊᔪᒪᑐᐃᓐᓇᑦᑐᑦ ᓄᓇᑦᑎᐊᑉ ᐱᕈᑦᑎᒋᕙᑦᑕᔾᔪᑦ. ᓄᓇᑦᑎᐊᕐᒥᐅᑉ ᐅᓄᑦᓂᔾᔪᑦ ᐃᓚᕙᑦᓕᐊᕋᓕᓴᑦᑐᒻᒪᕆᐅᕗᑦ. ᐊᒥᓱᓂᖅᐅᓕᑦᑉᑕ ᑭᑐᑐᐃᓐᓇᐃᑦ ᑐᑭᖃᑦᑐᖕ ᐊᑐᑦᑕᐅᓂᐊᖅᐅᓂᐊᑦᓂᖓᓂᒃ ᐃᒪᖕ ᓄᓇᒋᒃᐅᔪᒥ ᓂᕿᓗ; ᐆᒻᒪᖕᑯᑎᑦ ᐊᑐᑦᑕᐅᓂᔾᔪᑦ ᐃᓚᕙᑦᓕᓂᐊᑦᑐᑦ ᐊᒻᒪ ᐊᑦᑕᑯᑦ ᐊᔾᔪᑦᓕᕙᑦᓕᑦᓗᑎᒃ ᐱᓕᕆᖕᒪᔪᐊᓂᑦᓗ ᐊᑦᑕᑯᑦᑕᐅᕙᑦᓕᐊᔪᑦ ᐊᔾᔪᑦᓕᕙᑦᓕᑦᓗᑎᒃ.

ᐃᓱᒪᒋᔭᐅᔪᑦ ᑕᐅᑐᖅᑰᑦᑕᐅᔪᑦ ᖃᓄᐃᑦᑕᕆᐊᖅᔾᔪᓐᓂᒃ

ᑭᑐᑐᐃᓐᓇᐃᑦ ᐊᔾᔨᒌᔾᔪᑦᑐᒥᒃ ᐃᓱᒪᒋᔭᖃᑦᑐᑦ ᖃᓄᖕ ᓄᓇᑦᑎᐊᖕ ᐱᕈᑦᑎᓕᐊᓇᔭᕆᐊᖅᔾᔪᓄᑦ.

ᐃᓚᔾᔪᑦ ᕿᒥᑦᕈᓱᕙᕗᑦ ᓄᓇᑦᑎᐊᕐᒥᒃ ᑭᕙᓪᓕᑦᑉᕙᓂᖓᓂᒃ, ᑎᒍᐊᖃᑦᐊᐅᖃᑦᑕᔾᔪᑦᑐᓂ ᓂᔪᑎᓂ ᑕᒫᓂᔾᔪᑦᑐᐃᓐᓇᑦᑐᒃᑦ. ᐱᕈᑦᑎᓕᐊᕙᔾᔪᑦᓗᑎᒃᓗ ᑐᓴᓇᑦᑐᑦᑐᖃᐅᑉᓗᑎᒃ ᓱᓇᑐᐃᓐᓇᑦᓂᒃ ᐱᕈᑦᑎᓕᐊᕙᔾᔪᑦᓂᔾᔪᑦ.

ᐊᒻᒪ ᐃᓚᔾᔪᑦ ᕿᒥᑦᕈᓱᕙᕗᑦ ᓄᓇᑦᑎᐊᖅ ᐱᕈᑦᑐᖃᒻᒪᕆᓐᓂᖓᓂᒃ ᐱᓕᕆᐊᕙᓕᓕᐊᒥᐊᖃᑦᓂᖓᓂᒃᓗ ᐃᓱᒪᑉᓗᑎᒃ.

1977-ᒥ ᒥᔾᑕ ᐃᖅᑐᐃᕈ ᑖᒻ ᔅᔾᔪ ᐊᔾᔨᒌᔾᔪᑎᑕᐅᓂᖓᓂᒃ ᐅᖃᐅᓯᖃᓚᐅᕗᖅ ᐃᓚᔾᔪᑦ ᑕᑯᖃᑦᑕᑦᓂᕋᑦᓗᒋᑦ ᐅᑭᐅᑦᑕᑐᒥᒃ ᐊᔾᔪᑦᕋᓇᔭᒥᑐᑦ ᐊᒻᒪ ᐱᖃᑎᔾᔪᑦ ᑕᑯᖃᑦᑕᑦᓂᕋᑦᓗᒋᑦ ᐱᕈᑦᑎᓕᐊᔪᑎᓴᖃᑦᓗᑎᒃ ᐱᓕᕆᐊᖃᖅᐊᓴᑎᑐᑦ ᑕᑯᖃᑦᑕᑦᓂᕋᑦᓗᒋᑦ.

ᑕᐃᓱᒪᓂᒃᑲᓐᓂᖕ, ᐃᓱᒪᒋᔭᐅᔪᑦ ᑕᐅᑐᖅᑰᑦᑕᐅᑉᓗᑎᒃ ᐱᓕᕆᐊᖑᖃᑦᑕᔾᔪᒪᕗᑦ ᐊᐃᕙᔾᔪᑕᐅᑉᓗᑎᒃ ᐊᕙᓗᒥᐅᑕᓕᕆᓂᕐᒧᑦ ᑲᑎᒪᔪᓂ ᐱᕈᑦᑎᓕᐊᕙᔾᔪᑦᑐᓂ ᐱᓕᕆᐊᖃᕈᒪᔫᒐᐊᓂ. ᑭᓯᐊᓂ ᑕᒪᒃᑯᐊ ᑲᑎᒪᔾᔪᑕᐅᖃᑦᑕᓚᐅᑦᑐᑦ ᐅᖃᐅᓯᕆᔭᐅᔪᒧᑦ ᑐᖕᒐᕙᔾᔪᐅᔾᔪᓚᑦ, ᐊᑯᓂᐅᔪᖅ ᐊᑐᓕᑦᑎᑕᐅᓇᓱᒃᓂᐊᑦᑐᓄᑦ ᐱᕈᑦᑎᓕᐊᔪᑎᔾᔪᓄᑦ.

ᐱᐅᓂᖅᐃᑦ ᐃᓕᖅᑯᓱᕆᔭᐅᖃᑦᑕᕋᔭᑦᑐᑦ ᐱᕈᑦᑎᓕᐊᓂᑦᒧᑦ ᐋᖅᑭᑦᑕᐅᕙᑦᓕᐊᕗᑦ.

ᓄᓇ ᐊᑐᑦᑕᐅᕙᒃᓂᖓᓄᑦ (ᓱᖕᓗ ᐊᑐᓕᖑᔭᐅᔪᖅ ᑕᑦᓗᕈᑎᐅᑉ ᐃᒪᖓᓂ ᐸᒃᓇᒍᑕᐅᑉᓗᓂ) ᐃᑲᔫᑎᖃᖃᑦᑕᑦᑐᑦ ᓱᕗᑦᓕᐅᑎᑕᐅᖑᔭᐅᔪᓄᑦ ᓇᓗᔾᔪᑦᔪᑕᐅᑉᓗᑎᒃ ᐱᓕᕆᐊᖃᕈᒪᔪᓄᑦ ᐱᓕᕆᐊᖑᕆᐊᓚᐅᔾᔪᒃᓂᔾᔪᒃᓂ ᐱᓕᕆᐊᖑᓂᐊᑦᑐᑦ. ᐋᖅᑭᑦᑕᐅᓂᔾᔪᑦ ᓄᓇᓕᒃᓂ ᑎᒥᑦ ᐊᒻᒪ ᓴᔾᔪᑦᑎᒋᐊᑦᑕᐅᓂᔾᔪᑦ ᓄᓇᓖᑦ ᐃᓚᐅᓂᖃᑦᓂᔾᔪᑦ ᐃᑲᔫᑎᖃᖃᑦᑕᑦᑐᑦ ᓴᖅᑭᔭᑦᑎᑦᑎᔾᔪᑦᑕᐅᑉᓗᑎᒃ ᐃᓚᐅᓂᖃᑦᓂᔾᔪᒃᓄᑦ ᓄᓇᓖᑦ ᐊᐃᑦᑐᔾᔪᒪᓂᔾᔪᑦ ᐊᒻᒪ ᓄᓇᖃᑦᑐᑐᖃᐃᑦ. ᐋᖅᑭᑦᑕᐅᓂᔾᔪᑦ ᐱᓕᕆᐊᓄᑦ ᐊᐅᓚᑦᑎᔨᓴᑦ ᑲᑎᒪᔨᑦ ᐊᒻᒪ ᑲᑎᒪᔨᓴᐅᓂᐊᑦᑐᑦ ᓄᓇᑖᑦᓂᑦᒧᑦ ᐊᔾᔨᑎᓕᐊᑎᒍᑦ ᐃᑲᔫᑎᖃᖃᒃᓂᑦᓂᐊᑦᑐᑦ ᓴᖅᑭᔭᑦᑎᑦᑎᔾᔪᑦᑕᐅᓗᑎᒃ ᓄᓇᖃᑦᑐᑐᖃᐃᑦ ᐃᓱᒪᒋᔭᔾᔪᒃᓂᒃ ᐱᔪᒪᔭᔾᔪᒃᓂᒃ.

ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᔾᔪᑦ ᐃᓕᖅᑯᓱᑦᑖᕆᐊᖃᑦᑐᑦ ᐊᑯᓂᐅᔪᒧᑦ ᐱᕈᑦᑎᓕᐊᓂᑦᒧᑦ ᐱᕙᓪᓕᐊᓂᑦᒧᑦ ᑐᑦᓴᔪᒥᒃ ᐱᕈᑦᑎᓕᐊᓂᐅᓂᐊᑦᑐᖅ ᑕᑯᔭᐅᑦᑎᐊᑦᓗᓂ ᐱᓕᕆᐊᖑᑦᑎᐊᑦᓂᖅᐅᔪᓐᓇᑦᓂᐊᕐᒪᑦ.

ᒫᓐᓇᐅᔪᖅ ᓴᓐᔾᓂᖅᑐᑦ

ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᔾᑦ "ᐅᑭᐅᑦᑕᑐᒧᑦ ᐊᑐᑐᐊᑦᑎᑦᑎᔨᐅᕗᖅ" ᓴᓐᔾᓂᖅᑐᓗᑎᒃ ᓄᓇᐃᑦ ᑕᒪᐃᓐᓂᒃ 97%-ᐅᖓᑖᓄᑦ. ᓴᓐᔾᓂᖅᑐᑦ ᐃᓕᑕᕆᔭᐅᓯᒪᔪᓄᑦ ᓄᓇᓄᑦ, ᐅᔭᕋᓐᓂᐊᓐᓂᑦᒧᑦ ᐱᓕᕆᐊᖑᔪᓄᑦ, ᐃᒪᐃᑦ ᐊᑐᑦᑕᐅᕙᓐᓂᔾᔪᓄᑦ, ᐅᖅᓱᐊᓗᓕᕆᓐᓂᑦᒧᑦ ᒫᓐᓕᕆᓐᓂᑦᒧᑦ.

ᒫᓕᒐᐊᖑᔪᒃᑯᑦ ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᔾᑦᑕ ᐊᐅᓚᔭᖓᑦᑎᒍᑦ: ᑕᕆᐅᑉ ᓱᒃᔭᖓ ᐊᒻᒪ ᐃᒪᕐᒥᐅᑕᐃᑦ ᑕᕆᐅᕐᒥᐅᑕᐅᔾᔪᑐᑦ ᐃᖃᓗᐃᑦ, ᐃᖃᓗᐃᑦ ᓴᐳᓐᓂᐊᑦᑕᐅᓂᔾᔪᑦ, ᐊᖑᓇᓱᒃᑕᐅᓂᔾᔪᑦ ᐊᓯᐊᓄᑦ ᐃᔾᔪᑦ-ᕋᕙᒃᑐᑦ ᑎᔾᒥᐊᑦ, ᑎᑭᑎᑕᐅᕙᓐᓂᔾᔪᑦ, ᓴᓇᔭᐅᕙᓐᓂᔾᔪᑦ ᐋᓐᓂᐊᓐᓇᑦᑐᖅᑐᑦ ᐅᓗᓇᐊᓇᑦᑐᑦ ᓴᓇᕈᑎᓄᑦ ᐃᓚᒋᔭᐅᕙᒃᑐᑦ.

ᐊᔪᔾᔪᓐᓂᖅᓇᕗᑦ ᓴᓐᔾᓂᖅᑐᓗᑎᒃ ᑮᒻᒪᖅᑯᑎᓕᕆᓐᓂᑦᒧᑦ ᐊᐅᓚᑦᑎᑕᐅᕙᒃᑐᓄᑦ, ᓱᑉᓗᐊᓗᒃᓄᑦ, ᒪᓕᒃᑕᖅᓴᓕᐅᑦᓂᕐᒥᒃ ᐅᑭᐅᑦᑕᑑᑦ ᐃᒪᔾᔪᓄᑦ, ᐊᔾᔨᖅᑎᒌᒐᓱᐊᓂᕐᒥᒃ ᑲᓇᑕᐅᑉ ᓱᓚᑖᓄᑦ ᐱᔾᔪᑎᒋᓗᒋᑦ ᒪᖑᐃᑦ ᓱᕈᓐᓇᑦᑐᑦ ᐊᒻᒪ ᑐᒃᑐᐃᑦ ᐃᔾᔪᕋᕙᓐᓂᔾᔪᑦ ᑭᒃᓕᒋᔭᐅᔪᓄᑦ ᓄᓇᐃᑦ ᐊᓯᔾᔪᓐᓄᑦ.

ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᔾᑦ ᑲᒪᒋᔭᖅᓴᖅᑐᑦ ᓂᔪᑎᓂᒃ, ᓇᑉᑐᓂᒃ, ᐊᐅᓚᑦᓂᕐᒥᒃ ᑲᒥᓯᓇᐅᑉ ᓄᓇᖑᑎᔾᔪᓐᓂᒃ, ᐊᒻᒪ ᐊᕙᓗᒥᐅᑕᒥᒃ ᓴᐳᓐᓂᐊᑦᓂᕐᒥᒃ. ᐃᑲᔪᓇᐊᖅᑕᓇᕗᑦ ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᔾᔪᓐᓂᒃ ᐱᓕᕆᔨᓯᓄᑦ ᐊᐅᓚᑦᑎᓂᕐᒧᑦ ᐱᕈᑉᐸᓕᐊᑎᑦᑎᓂᕐᒧᑦ ᐊᕙᓗᒥᐅᑕᓕᕆᓂᕐᒧᓐᓗ ᐱᕈᑉᐸᓕᐊᑎᑦᑎᓂᕐᒧᑦ ᐊᐅᓚᑦᑎᑦᓗᒋᑦ ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᔾᑦ ᐃᑲᔪᓇᐊᑉᐸᑉᔾᔪᑦ. ᐱᓕᕆᐊᖃᓗᐊᑉᐸᑦᑐᑦ ᐃᖅᑲᓇᐃᔭᕐᓂ ᐅᑯᐊᖑᕗᑦ: ᓄᓇᒥᐅᑕᓕᕆᔨᒃᑯᑦ, ᑮᒻᒪᖅᑯᑎᓕᕆᔨᒃᑯᑦ ᐅᔭᕋᓐᓂᐊᑦᑐᓕᕆᔨᒃᑯᑦ, ᐊᒻᒪ ᐱᕙᓪᓕᐊᔪᓕᕆᔨᒃᑯᑦ ᐳᓚᕋᑦᑐᓕᕆᔨᒃᑯᑦ.

ᓄᓇᑦᑎᐊᕐᒥ ᒪᓕᒐᐃᑦ ᓴᓚᖅᓴᓐᓇᔾᔪᓚᑦ ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᔾᔪᑦᑕ ᒪᓕᒐᔾᔪᓐᓂᒃ ᓄᓇᑦᑎᐊᕐᒥᓗ ᐊᑐᑦᑕᐅᓂᔾᔪᑦ ᑭᒃᓕᖅᑲᓗᑎᒃ.

ᐊᑐᐊᒐᑦᒧᑦ ᓇᓗᓇᔾᔭᐅᓯᒪᕙᔾᑐᑦ: ᐊᕙᓗᒥᐅᑕᓄᑦ ᐃᒃᐱᓐᓇᑦᓂᓕᔭᐅᔪᓄᑦ ᖃᐅᔨᓴᑦᑕᐅᔪᑦ.

ᐊᔾᔨᒌᔾᔪᑦ ᐊᑐᐊᒐᐃᑦ ᐊᑐᐊᒐᓕᐅᑉᐸᑉᔾᔪᑦ ᑎᒥᑦ. ᐱᓕᕆᕝᕕᐅᔪᑦ ᐊᔾᔪᔪᑦ ᓈᒻᒪᔾᔪᓐᓂᕋᐃᖃᑦᑕᑦᔾᔪᑦ ᐅᖃᑦᓗᑎᒃ ᐃᓚᔾᔪᑦ ᒪᕐᕈᐃᓕᖓᖃᑦᑕᑦᓂᔾᔪᓐᓂᒃ ᐊᑐᐊᒐᑦ, ᒪᓕᒃᑕᖅᓴᓂᒃᓗ ᐊᑐᐊᒐᑦᓂᒃ ᒪᓕᒃᓯᒪᔾᔪᓐᓂᕋᐃᕙᒃᑐᑦᓗᑎᒃ, ᐊᐅᓚᑦᑎᔪᑎᓄᓪᓗ ᓈᒻᒪᔾᔪᑦᑐᑦ ᑕᐃᒪᐅᕙᒃᑐᑦᓗᑎᒃ. ᐱᓕᕆᐊᖑᓂᐊᑦᑐᒧᑦ ᐃᔾᔪᑦᕋᑕᐅᑦᑎᐊᕈᓐᓂᓂᑯᔾᔪᑦ ᐊᒻᒪ "ᐊᑕᐅᓯᑐᐃᓐᓇᑦᒧᑦ ᑐᕌᖓᑦᓗᑎᒃ" ᐱᓕᕆᐊᖑᔪᑦ.

ᓴᓐᔾᓂᑖᔾᔪᓕᕆᔪᑦ ᑎᒍᓯᕙᓕᕆᐊᓂᔾᔪᑦ

ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᔾᑦ ᒫᓐᓇ ᐊᔾᔨᖅᑎᒌᒍᑎᖅᕋᓱᒃᔾᑦ ᐊᔪᔾᔪᓐᓂᑖᑦᑎᑦᑎᓂᕐᒧᑦ ᑎᒍᓯᕙᓕᕆᔪᑎᓴᓂᒃ ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᔾᔪᓐᓂᑦ.

ᓯᕗᓪᓕᑉᐸᖑᑉᓗᓂ ᐊᔾᔨᖅᑎᒌᒍᑕᐅᔪᖅ ᐅᑭᐅᑦᑕᑐᒥ ᐊᔾᔨᕈᑕᐅᔪᒧᑦ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓂᐊᕐᖅ ᓄᒃᑎᑦ-ᑕᐅᓂᓴᖓᓄᑦ ᐅᖅᓱᐊᓗᓕᕆᓂᕐᒧᑦ ᒫᓐᓕᕆᓂᕐᒧᑦ ᐱᓕᕆᐊᖑᓇᒃᑐᑦ ᐱᕈᑉᐸᓕᐊᑎᑕᐅᓗᑎᒃ ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᔾᔪᓐᓄᑦ ᑮᓇᐅᔭᑖᖓᖃᑦᑕᖃᔭᑦᑐᑦ ᐊᒥᖅᖃᑦᑕᐅᓗᑎᒃ. ᑭᓯᐊᓂᑦᑕᐅᖅ, ᑕᒪᐃᓐᓂᒃ ᐊᔪᔾᔪᓐᓂᕐᓇᔭᐅᔪᑦ ᐊᔾᔨᔾᔪᑦ ᑲᓇᑕᐅᑉ ᐊᕕᑦᑐᓯᒪᓂᔾᔪᓐᓄᑦ ᐊᔪᔾᔪᓐᓂᕐᓇᔭᐅᔪᐃᑦ ᑎᒍᔭᐅᓂᐊᕐᑑᔭᔾᔪᑦᑕ ᓴᓐᔾᓂᐅᔪᑦ--ᑮᓇᐅᔭᓕᕆᓂᐅᔪᑦ--ᑎᒍᔭᐅᓂᐊᕐᑑᔭᔾᔪᑦᑎᐊᕐᑐᑦ.

ᖃᓄᑐᐃᓐᓇᖅ ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᔾᑦ ᑐᓂᔪᓯᐊᑉᐸᑦ ᓴᓐᔾᓂᓇᔭᐅᔪᓂᒃ ᑲᓇᑕᐅᑉ ᒐᕙᒪᒃᑯᔾᔪᓐᓂᑦ ᐊᒥᖅᖃᑦᑕᐅᓂᐊᕐᑐᑦ ᖃᑉᓗᓈᕐᔾᔪᑦᑐᑦ ᑲᑐᔾᔨᖃᑎᒌᔾᔪᓐᓄᑦ.

ᐃᓱᒪᓗᑎᖃᒻᒪᕆᔅᑦ ᑕᒪᓐᓇ ᒪᕐᐃᓕᖕᓕᕈᑕᐊᒃᑲᓐᓂᔅᓂᐊᕋᓱᒋᔭᐅᑉᓗᓂ ᐊᐅᓚᑦᑎᓂᔅᒧᑦ ᐱᕈᑉᐸᓪᓕᐊᑎᑦᑎᓂᔅᒧᓪᓗ ᐱᖑᑎᒋᔭᐅᔪᓂ.

ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᖏᑦ ᓯᕗᓕᑦᑎᐅᓗᑎᒃ ᐊᐅᓚᑦᑎᔅᔪᓐᓂᒃ ᐋᖅᑭᒃᓱᓇᓱᐊᕆᐊᖃᕐᑦ.

2. ᑭᐅᖃᑦᑕᔅᓂᖅ ᒫᓐᓇ ᐊᑐᑦᑕᐅᒋᐊᖃᕐᑐᓂᒃ ᓯᕗᓂᓴᑦᑎᓐᓂᓗ

ᐱᕈᑉᐸᓪᓕᐊᒃᔪᓱᐅᓇᔭᕐᑐᓄᑦ ᑲᔪᓱᐅᒪᐃᓐᓇᕈᓱᐅᓇᔭᕐᑐᑦ

ᑕᐃᒪᖓᓂᑦ 1980-ᒥᑦ, ᐱᕈᑉᐸᓪᓕᐊᒃᔪᑕᐅᓇᔭᕐᑐᑦ ᑲᔪᓱᐅᒪᐃᓐᓇᕈᑕᐅᓗᑎᒃ ᐃᓱᒪᒋᔭᐅᔾᔪᓐᓇᐅᔭᕆᐊᓕᕋᒥᒃ ᐃᓱᒪᒋᔭᐅᔾᔪᓐᓇᓕᕐᑦ. ᐅᖃᐅᓱᐅᖃᑦᑕᕐᖅ ᖃᓄᖅ ᑕᒪᓐᓇ ᑐᑭᖃᑦᑎᑕᐅᓪᓕᕆᐊᒃᓴᖓ ᖃᐅᔨᔭᐅᓇᓱᒃᓗᓂ "ᐱᕈᑉᐸᓪᓕᐊᒃᔪᓱᐅᓇᕐᑐᑦ ᑲᔪᓱᐅᒪᐃᓐᓇᕈᑕᐅᓇᔭᕐᑐᑦ" ᖃᓄᖅ ᑐᑭᖃᑦᓕᕆᐊᒃᓴᖓᓂᒃ ᐅᖃᐅᓱᖃᖃᑦᑕᕐᑦ. ᑐᑭᖃᑦᑑᔭᕆᔭᐅᕗᖅ ᓇᓂᓱᓂᖅ ᐱᕈᑉᐸᓪᓕᐊᒃᔪᑕᐅᓇᔭᕐᑐᓂᒃ ᐱᓕᕆᐊᓄᑦ ᒫᓐᓇᐅᔪᖅ ᐊᑐᑦᑕᐅᒋᐊᖃᕐᑐᑦ ᑭᐅᓗᒋᑦ ᓯᕗᓂᓴᒧᑦ ᐊᑐᑦᑕᐅᒋᐊᖃᕐᑐᑦ ᐊᖅᓴᑦᑕᐅᓯᒪᔪᑎᓪᓗᒋᑦ.

ᑐᕌᖅᐅᔪᒪᔪᑦ ᐱᕈᑉᐸᓪᓕᐊᒃᔪᓱᐅᓇᔭᕐᑐᓄᑦ ᑲᔪᓱᐅᒪᐃᓐᓇᕈᓱᐅᓇᔭᕐᑐᑦ

ᓄᓇᒥᐅᑕᓕᕆᓂᔅᒧᑦ ᐱᕈᖃᓂᑉᐸᔅᑐᓄᑦ ᑐᕌᖅᐅᔪᒪᔪᑦ:

1. ᐋᖅᑭᐅᒪᑎᑦᑎᓗᑎᒃ ᐃᓄᒃᔪᑎᒋᔭᐅᕙᔅᑐᓂᒃ ᐅᑉᓗᒥᐅᔪᖅ ᐃᓄᓱᑦᒧᓪᓗ ᑲᔪᓱᐅᒪᐃᓐᓇᕈᑕᐅᕙᔅᑐᓂᒃ (ᐋᖅᑭᒃᑕᐅᔪᓐᓇᐃᓪᓕᑎᑦᑎᔅᒥᓪᓗᑎᒃ ᓯᓚᐅᑉ ᖃᓄᐃᓐᓂᖓᓂᒃ, ᓄᓇᔪᐊᑉ ᖁᓛᓂ ᐊᔾᒪᔪᒥᒃ, ᓇᑉᑐᓂᒃ)

2. ᐊᓐᓂᐅᒪᒃᔪᑎᓂᒃ ᑲᔪᓱᐅᒪᐃᓐᓇᑦᑎᑦᑎᓗᑎᒃ (ᐊᑐᐃᓐᓇᐅᔭᕐᓇᑦᑎᑦᑎᓗᑎᒃ ᓴᖅᑭᔭᕐᓇᑦᑎᑦᑎᓗᑎᒃ ᓂᔪᑎᓂᒃ ᐊᔾᔨᒌᔭᕐᑐᓂᒃ ᓴᐳᓐᓂᐊᔾᔪᒪᐃᓐᓇᔅᓗᒋᓪᓗ ᐊᕙᓗᒥᐅᑕᔭᕐᑦ ᓴᖅᑭᑦᑎᔪᓐᓇᐃᓐᓇᖑᔅᓗᒋᑦ ᐋᖅᑭᐅᒪᑦᑎᐊᕐᑐᓂᒃ ᓂᔪᑎᓂᒃ ᐊᔾᔨᒌᔭᕐᑐᓂᒃ).

3. ᑲᔪᓱᐅᒪᐃᓐᓇᕈᓱᐅᓇᔭᕐᑐᖅ ᐊᑐᓕᑦᑎᓪᓗᒍ ᓂᔪᑎᓄᑦ ᐃᓄᒃᔪᑎᓄᓪᓗ (ᓂᔪᑎᓂᒃ ᐊᑐᔅᓂᒃᑯᑦ ᑭᒃᓕᖃᑦᑎᑦᑎᓗᑎᒃ ᒪᓕᒃᓗᒋᑦ ᓴᖅᑭᑉᐸᓪᓕᐊᔪᓐᓇᑦᑎᑕᔭᕐᑦ ᐅᓄᔅᓂᓇᓗᒋᑦ ᐱᑕᑉᐸᔭᕐᑕᔭᕐᓂ.)

ᐱᕈᖃᓐᓂᕈᓐᓇᔭᕐᑐᑦ ᐱᓕᕆᐊᓴᔭᕐᓄᑦ ᑐᕌᖅᐅᔪᒪᔪᑦ:

1. ᐃᓚᒋᐊᑦᑎᑦᑎᓗᑎᒃ ᐊᑯᓂᐅᔪᖅ ᕿᓚᒻᒥᐅᔪᑦᓗ ᐃᑲᔫᑕᐅᕙᔅᑐᓂᒃ ᓄᓇᓕᔅᓄᑦ ᐊᔅᑐᐊᓂᖃᑦᑐᓂᒃᓗ ᐱᓕᕆᐊᓄᑦ ᐊᑐᑦᑉᔅᑐᓄᑦ ᐱᕈᑉᐸᓪᓕᐊᑎᑦᑎᓂᔅᒧᑦ ᐃᓚᒋᐊᑦᑎᑦᑎᓗᑎᒃ.

2. ᐊᑐᓗᐊᑦᑕᐃᓕᒪᓗᑎᒃ ᐱᕈᖃᓐᓂᕈᓐᓇᔭᕐᑐᓂᒃ ᑑᒻᒪᖅᑯᑎᒃᑯᑦ ᐊᑐᓗᐊᑦᑕᐃᓕᒪᓂᒃᑯᑦ ᐃᓕᖅᑯᓱᕆᔭᐅᕙᔅᑐᒃᑯᑦᓗ ᐊᑐᓗᐊᑦᑕᐃᓕᒪᓂᔅᒧᑦ ᐊᑐᓗᐊᑦᑕᐃᓕᖃᑕᐅᓗᑎᒃ.

3. ᐃᓚᒋᐊᑦᑎᑦᑎᓗᑎᒃ ᐊᑐᒃᖃᓐᓂᕈᓱᐅᕙᔅᑐᓂᒃ ᓱᓇᑐᐃᓐᓇᔅᓄᑦ ᐊᑐᑦᑕᐅᖃᓐᓂᑦᑎᑦᑎᒋᐊᑦᑉᔅᓗᑎᒃᓗ ᐅᔭᕋᔅᓂᐊᑦᑐᓕᕆᓂᔅᒧᑦ ᐱᓕᕆᔪᓱᐅᕙᔅᑐᓂᒃ ᐱᓕᕆᐊᔅᓂᓗ ᐊᑦᑕᑑᑦᑕᐅᔪᓂᒃ ᐊᑐᕆᐊᖃᓐᓂᑉᐸᓪᓗᑎᒃ.

4. ᐃᒃᐱᔅᓇᔅᓂᕆᔭᐅᔪᓂᒃ ᐋᖅᑭᐅᒪᔭᓕᕈᑕᐅᔪᓂᒃ ᐊᑐᕈᓐᓃᑦᑎᑦᑎᓗᑎᒃ ᐅᖅᓱᐊᓗᔅᓂᐊᔅᓂᕐᒥᑦ, ᐅᔭᕋᖅᓱᐅᔅᓂᕐᒥᑦ, ᐱᓕᕆᐊᔪᔪᓂᑦ, ᐅᖅᓱᐊᓗᓕᐅᕐᐱᔅᓂ ᓄᒃᑎᑦᑕᐅᕐᐱᔭᕐᓂ ᐅᖅᓱᐊᓗᑉ, ᒐᒃ ᐅᔭᕋᔅᓂᐊᑦᑕᐅᔪᓪᓗ ᐃᒃᐱᔅᓇᔅᓂᕆᔭᐅᑎᑦᑎᐊᔭᕐᑕᔭᕐᓂᒃ ᐊᑐᕈᓐᓃᑦᑎᑦᑎᓗᑎᒃ.

ᒐᕙᒪᒃᑯᑦ ᐃᓚᖏᓪᓗ ᐱᓕᕆᕝᕕᐊᕐᒍᔪᑦ (ᐱᓗᐊᕐᑐᒥᒃ ᐅᔭᕋᓐᓂᐊᕐᑐᓕᕆᔨᑦ ᑲᒻᐸᓂᖏᑦ) ᐊᑐᕐᐸᓪᓕᐊᖃᑦᑕᓕᕐᑐᑦ ᐃᑲᔫᑕᐅᔪᓂᒃ ᐃᒃᐱᒋᔭᖃᑦᑎᐊᕐᓂᖅᐅᕐᓗᑎᒃ.

ᒪᓕᒃᑕᖅᓇᔭᐅᔪᑦ ᐱᓕᕆᐊᖅᓄᑦ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑕᐅᓇᔭᕐᑐᑦ ᐱᕈᐸᓪᓕᐊᑎᑕᐅᑎᓪᓗᒋᑦ

ᑕᒪᓐᓇ ᐃᓱᒪᒋᔭᐅᓂᖓ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑕᐅᓇᔭᕐᑐᑦ ᐱᕈᐸᓪᓕᐊᔪᑎᖅᑦ ᑐᕋᕐᕕᖃᑦᑎᑕᐅᒋᐊᖃᑦᑐᖅ ᐊᑐᑦᑕᐅᒋᐊᖃᑦᑐᓄᑦ ᐱᓕᕆᕝᕕᕐᓄᑦ ᐊᕐᔫᒌᕐᑐᓄᑦ, ᐊᕕᕐᑐᔪᒪᓂᐅᔪᓄᑦ ᓄᓇᓕᕐᓄᑦ, ᓄᓇᓕᕐᓄᑦ ᒥᑭᔪᓄᑦ. ᐅᖃᐅᔫᒋᐊᕐᑏᑦ ᓯᑕᒪᓂᒃ ᒪᓕᒃᑕᖅᓂᒃ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓚᐅᕐᑐᑦ ᐃᑲᔫᑎᖅᐅᑎᓪᓗᒋᑦ.

1. ᓇᓗᓇᐃᕐᓗᒋᑦ ᐃᓕᑕᕆᓗᒋᑦ ᐊᕙᓗᒥᐅᑕᓄᑦ ᐊᑐᑦᑕᐅᕙᕐᑐᑦ ᐊᕐᑐᐊᓂᖃᕐᓂᖏᓐᓂᒃ ᑮᓇᐅᔭᓕᕆᓂᕐᒧᑦ ᐊᑐᐊᒐᐅᔪᓄᑦ ᐊᒻᒪ ᐱᓕᕆᔨᓯᒋᔭᐅᕐᒐᔭᐅᔪᓄᑦ. ᐱᔭᕇᑎᒋᓗᒋᒃ ᖃᓂᒌᕐᓂᖏᒃ ᑮᓇᐅᔭᓕᐅᕈᑕᐅᕙᕐᑐᑦ ᐊᒻᒪ ᐅᕙᓗᒥᐅᑕᑦ, ᑮᓇᐅᔭᓕᐅᕈᑕᐅᕙᕐᑐᑦ ᐊᕙᓗᒥᐅᑕᐃᓐᓗ ᐊᑐᐊᒐᖏᑦ ᐱᕈᐸᓪᓕᐊᑎᑕᐅᔪᓐᓇᖏᒻᒪᑕ ᐊᑎᔭᒪᓗᒋᒃ ᐃᓛᒃᑰᑦᓗᒋᒃ.

2. ᐊᑐᕐᓂᖅᐅᖃᑦᑕᕐᓗᑎᒃ ᐅᖃᖃᑦᑕᐅᑎᓂᕐᒥᒃ ᐱᓕᕆᕝᕕᕐᓂ ᑕᒪᒃᑯᐊ ᐱᓕᕆᕝᕕᕐᓂ ᑐᓗᑦᑕᕈᑕᐅᔪᑦ ᐊᑐᖏᓐᓂᖅᐅᔪᒪᓗᒋᑦ. ᒪᒃᐱᒐᖓᓂ 26-ᒥ ᑖᑦᓯᒪ ᐅᓂᖃᑦ ᐅᖃᐅᔪᐃᕈᑦ ᖃᐅᕈᓴᐃᕈᑦ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᕗᑦ ᐊᐱᖅᑯᑎᖅᓂᒃ ᐊᐱᖅᓇᖃᑦᑕᐅᑎᒋᔭᐅᓇᔭᕐᑐᓂᒃ ᐃᓱᒪᓕᐅᓇᕈᓄᑦ ᐱᓕᕆᐊᖃᑦᑕᓪᓕᐊᓕᕐᔪᖓᒥᒃ ᐱᕈᐸᓪᓕᐊᔪᑕᐅᓂᐊᕐᑐᓂᒃ ᐃᖏᕋᑎᑦᑎᕙᓪᓕᐊᓕᓴᕐᔪᖓᒥᒃ.

3. ᐸᐸᑦᑎᓗᑎᒃ ᑐᓴᒐᖅᓴᒥᒃ ᐋᖅᑭᐅᒪᓛᖑᔪᒥᒃ. ᐃᑲᔫᑎᖃᒻᒪᓇᒍᓐᓇᕐᐳᖅ ᐊᑐᐊᒐᓕᕆᔨᒃᑯᑦ ᐋᖅᑭᐅᒪᓛᒥᒃ ᓄᑖᖑᓛᒥᒃᓗ ᑐᓴᒐᖅᓴᖑᑎᖃᑦᑕᑦ ᐃᓱᒪᓕᐅᕈᑎᖃᑦᓂᐊᕐᑎᓪᓗᒋᑦ ᐱᓕᕆᐊᒥᓐᓂᒃ.

4. ᐅᔭᕈᓱᑦᑎᐊᕐᓗᑎᒃ ᐃᒃᐱᒍᓱᑦᑎᐊᕐᓗᑎᒃ ᓄᓇᓕᕐᓂ ᐱᔪᒪᔭᐅᔪᓂᒃ ᓯᕗᓕᐅᑎᑕᐅᖑᔭᐅᔪᓂᒃᓗ. ᓄᓇᖃᕐᑐᑐᖃᐃᑦ ᐊᕙᓗᒥᐅᑕᖃᕐᓂᐊᕐᒪᑕ ᖃᓄᐃᓕᐅᕈᑕᐅᔪᓂᒃ ᓄᓇᖃᐃᓐᓇᕐᓂᐊᕐᓗᑎᒃᓗ ᐱᓕᕆᐊᖑᕝᕕᐅᓂᐊᕐᑐᓂ ᐱᓕᕆᐊᖑᕝᕕᐅᔪᒪᔪᓂ. ᓄᓇᓕᕐᓂ ᐊᕕᕐᑐᔪᒪᓂᐅᔪᓂ ᓄᓇᓕᑐᐃᓐᓇᕐᓂᓗ ᑐᕋᕐᕕᐅᔪᒪᔪᑦ ᐋᖅᑭᒃᑕᐅᒋᐊᖃᕐᑐᑦ ᑐᓐᖓᕝᕕᖅᓴᖏᑦ ᐱᓕᕆᕝᕕᐅᔪᓐᓇᕐᑐᑦ ᓴᖅᑭᑕᐅᓂᐊᕐᒪᑕ ᐃᓱᒪᖅᓴᔭᐅᕈᑕᐅᕝᕕᐅᔪᓐᓇᕐᑐᑦ.

3. ᐱᓕᕆᔨᓯᖅᓴᖏᑦ ᑲᑎᒪᔨᕋᓛᖑᑲᐃᓐᓇᕐᑐᑦ ᐅᑭᐅᑦᑕᕐᑐᒥ ᒪᑭᒪᔨᑎᖅᓴᑦ ᐱᔭᕇᑎᒋᓗᒋᑦ

ᑕᒡᕙᓂ ᑭᖑᓪᓕᕐᔪᒥ ᑎᑎᕋᔭᒪᓂᐅᔪᒥ ᐅᖃᐅᔪᐃᕈᑦ ᐊᑐᐃᓐᓇᐅᑎᑦᑎᕗᑦ 15-ᓂᒃ ᐊᑐᓕᖑᔭᒥᓐᓂᒃ. ᑕᒪᐃᓐᓂᖃᔭᖅ ᐊᑐᓕᖑᔭᐅᔪᑦ ᑐᓐᖓᕝᕕᖃᑦᑎᑕᐅᕗᑦ ᓯᑕᐅᒪᔪᓂᑦ: ᐃᑲᔪᑐᑦᑕᐅᖑᔪᓪᓗᒋᑦ ᒫᓐᓇ ᐃᖏᕋᓕᕆᐊᑦᑎᑕᐅᓂᑯᑦ; ᐱᓕᕆᔨᓯᖅᓴᑦ ᓴᖅᑭᑎᑕᐅᖑᔪᓪᓗᒋᑦ; ᐊᐅᓚᑦᑎᔨᔪᑎᖅᓴᑦ ᐃᓚᐅᑎᓪᓗᒋᑦ; ᐊᒻᒪ ᒥᐊᓂᕆᓗᒋᑦ.

ᐊᑐᓕᖑᔭᐅᔪᑦ

ᑲᑎᒪᔨᕋᓛᖑᑲᐃᓐᓇᕐᑐᑦ ᐃᒪᓐᓇᐃᓐᓇᔭᕐᒪᑕ:

1. ᑲᔪᓯᒋᐊᕐᑎᓪᓗᒋᑦ ᑐᕋᕐᕕᐅᔪᒪᔪᑦ ᐱᓕᕆᐊᖑᔪᒪᔪᓪᓗ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑎᖅᓴᓄᑦ ᐱᕈᐸᓪᓕᐊᓂᕐᒧᑦ ᑐᕋᕐᕕᒋᔭᐅᔪᒪᔪᑦ ᐱᓕᕆᐊᖑᔪᒪᔪᓪᓗ ᐃᓚᓕᐅᑎᓗᒋᑦ ᑲᑎᒪᔨᕋᓛᑦ ᐊᑯᓂ ᑮᓇᐅᔭᓕᕆᓂᕐᒧᑦ ᐱᕈᐸᓪᓕᐊᔪᑎᒋᒥᐊᕐᓂᐊᕐᑕᖅᑐᓄᑦ.

ᐃᑲᔪᑦᑐᐃᓂᖅ ᒪᓐᓇ ᐱᓕᕆᐊᒍᔪᒪᔪᓂᒃ

ᑲᑎᒪᔨᕋᓛᖑᑲᐃᓐᓇᑦᑐᑦ ᐃᒪᓐᓇᐃᓐᓇᔭᕐᒪᑕ:

2. ᐃᑲᔪᑦᑐᐃᓗᑎᒃ ᒪᓐᓇ ᓴᖅᑭᔭᑦᑐᓂᒃ ᐊᑐᓗᐊᑦᑕᐃᒪᓂᑦᒧᑦ ᐊᕕᒃᑐᑦᓯᒪᓂᐅᔪᓂ ᐱᓕᕆᐊᒍᔪᓂᒃ ᓄᓇᑦᑎᐊᑦᒥ ᐱᕈᑦᐸᓪᓕᐊᑎᑕᐅᓇᓱᒃᑐᓪᓗ ᐃᑲᔪᑦᑐᑦᓗᒋᑦ ᑕᐃᒪᓐᓇᐃᑐᑦ ᐱᓕᕆᐊᒍᔪᒪᔪᑦ.

3. ᐊᑐᓕᕐᔨᓗᑎᒃ ᑎᓕᔭᐅᓴᓕᕐᔨᓗᑎᒃ ᓄᓇᑦᑎᐊᑦ ᒐᕙᒪᒃᑯᖑᓂᒃ ᐊᕙᓗᒥᐅᑕᓕᕆᓂᑦᒧᑦ ᑮᓇᐅᔭᓕᕆᓂᑦᒧᓪᓗ ᑲᒪᔨᖅᓴᓂᒃ.

4. ᐃᑲᔪᑦᑐᐃᓗᑎᒃ ᓇᒥᓂᖅ ᐱᓕᕆᐊᒍᔪᓂᒃ ᐱᓕᕆᕝᕕᓪᓗ ᑲᔪᓯᒋᐊᑦᑎᑕᖑᓂᒃ ᐃᑲᔪᑎᖃᖃᑦᑕᑦᑐᓂᒃ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑕᐅᓂᐊᑦᑐᓄᑦ ᐱᕈᑦᐸᓪᓕᐊᔪᑎᖅᓴᓄᑦ ᑐᕌᑦᕕᐅᔪᒪᔪᓄᑦᓗ ᐃᓕᖅᑯᓯᕆᔭᐅᔪᒪᔪᓄᑦᓗ.

ᐱᓕᕆᒃᔪᓯᖅᓴᑦ ᓴᖅᑭᑎᑕᐅᒍᑦᓗᒋᑦ

ᑲᑎᒪᔨᕋᓛᖑᑲᐃᓐᓇᑦᑐᑦ ᐃᒪᓐᓇᐃᓐᓇᔭᕐᒪᑕ:

5. ᐊᑐᓕᕐᔨᓗᑎᒃ ᓄᓇᑦᑎᐊᑦ ᒐᕙᒪᒃᑯᖑᑦ ᖃᐅᔨᓴᐃᒍᑦᓗᒋᑦ ᐱᓕᕆᐊᒍᓕᑦᑎᑕᐅᑎᓐᓂᑯᖑᓂᒃ (ᐃᓗᐊᓂ ᒐᕙᒪᐃᑦ ᓯᓚᑖᓂᓗ) ᐊᒃᑐᐊᓂᖃᑦᑐᓂᒃ ᓄᓇᐅᑦ ᐃᓕᖅᑯᓯᑐᖃᖓᓄᑦ ᐱᕈᑦᐸᓪᓕᐊᔪᑕᐅᓇᔭᑦᑐᓄᑦᓗ ᓄᓇᑦᑎᐊᑦᒥ ᐊᒃᑐᐊᓂᖃᑦᑐᓂᒃᓗ ᐱᕈᑦᐸᓪᓕᐊᒃᔪᑎᖅᓴᑦ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑎᖅᓴᐅᔭᐅᑦᓗᑎᒃ ᑐᕌᑦᕕᖅᓴᖑᓐᓄᑦ.

6. ᐊᑐᓕᕐᔨᓗᑎᒃ ᖃᐅᔨᓴᑦᑕᐅᔪᖅ ᖃᐅᔨᓴᑦᑕᐅᕋᓂᒃᐸᑦ, ᓄᓇᑦᑎᐊᑦ ᒐᕙᒪᒃᑯᖑᑦ ᐃᑲᔪᑦᑐᐃᓗᑎᒃ ᐊᑐᕈᓐᓃᑦᑎᑦᑎᕐᔨᓂᑦᒥᒃ ᓄᖅᑲᖓᕈᑕᐅᓇᔭᑦᑐᓂᒃ ᐱᕈᑦᐸᓪᓕᐊᒃᔪᑕᐅᓇᔭᑦᑐᓄᑦ ᐊᒻᒪᓗ/ᐅᓐᕙᓗᓐᓃᑦ ᐃᓇᖑᑦᓯᒃᔪᑕᐅᔪᒪᔪᓂᒃ ᐱᕈᑦᐸᓪᓕᐊᒃᔪᑕᐅᓇᔭᑦᑐᓄᑦ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑎᖅᓴᓄᑦ ᐊᑐᕐᔨᖑᑦᓗᑎᒃ.

7. ᐊᑐᓕᕐᔨᓗᑎᒃ ᓄᓇᑦᑎᐊᑦ ᒐᕙᒪᒃᑯᖑᑦ ᐃᓕᖅᑯᓯᑦᑕᕐᓗᒋᑦ ᐱᓕᕆᕝᕕᒃᓂ ᐊᓯᖑᓐᓂᓗ ᐱᓕᕆᕝᕕᐅᕙᒃᑐᓂ ᐃᓕᖅᑯᓯᖃᕐᔨᓗᑎᒃ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑎᖅᓴᐅᓇᔭᑦᑐᓂᒃ ᐱᕈᑦᐸᓪᓕᐊᒃᔪᑎᖅᓴᓂᒃ ᐱᕈᑦᐸᓪᓕᐊᒃᔪᑕᐅᓂᐊᖑᑦᑐᑦ ᐊᑭᕋᑦᑐᓗᒋᓪᓗ ᑲᔪᓯᐅᐊᑦᑎᑦᑎᖑᓂᒃᑯᑦ ᐱᓕᕆᐊᒍᔪᒪᔪᓂᒃ.

8. ᐊᑐᓕᕐᔨᓗᑎᒃ ᓄᓇᑦᑎᐊᑦ ᒐᕙᒪᒃᑯᖑᑦ ᖃᐅᔨᓴᐃᒍᑦᓗᒋᑦ ᐱᓕᕆᒃᔪᓯᖑᓂᒃ ᑮᓴᖅᑯᑎᓕᕆᓂᑦᒧᑦ ᐊᒃᑕᑰᓂᑦᒧᓪᓗ ᐊᐅᓚᑦᑎᒃᔪᑎᒃ ᐊᑐᐊᒐᖑᓂᒃ ᐊᒃᑐᐊᓂᖃᒍᓗᒋᑦ ᐱᕈᑦᐸᓪᓕᐊᒃᔪᑕᐅᓂᐊᖑᑦᑐᓄᑦ ᑐᕌᑦᕕᐅᔪᒪᔭᖑᓐᓄᑦ ᐱᓕᕆᐊᒍᔪᒪᔪᓄᑦᓗ

ᐊᐅᓚᑦᑎᒃᔪᑎᖅᓴᑦ ᐃᓚᐅᑎᓪᓗᒋᑦ

ᑲᑎᒪᔨᕋᓛᖑᑲᐃᓐᓇᑦᑐᑦ ᐃᒪᓐᓇᐃᓐᓇᔭᕐᒪᑕ:

9. ᐊᑐᓕᕐᔨᓗᑎᒃ ᑕᒪᐃᓐᓂᒃ ᐱᓕᕆᐊᖅᓴᐃᑦ ᐱᓕᕆᕝᕕᒃᓂ ᐃᓚᖃᐅᓗᒃᑖᕐᓗᒋᑦ ᐱᕈᑦᐸᓪᓕᐊᒃᔪᑕᐅᔪᒪᔪᓄᑦ ᑲᔪᓯᐅᒪᐃᓐᓇᕈᑎᖅᓴᓂᒃ ᑐᕌᑦᕕᖅᓴᓂᒃ ᐊᒻᒪᓗ ᑕᒪᒃᑯᐊ ᐱᓕᕆᕝᕕᑦ ᐃᓛᒃᑯᑦ ᖃᐅᔨᓴᐃᖃᑦᑕᑦᓗᑎᒃ ᐱᓕᕆᐊᓇᕝᓕᐊᔭᖑᑦ ᑐᕌᑦᐸᓪᓕᐊᒋᐊᒃᓴᖑᓂᒃ ᑐᕌᑦᕕᒋᔪᒪᔭᖑᓐᓄᑦ.

10. ᐊᑐᓕᕐᓯᓗᑎᒃ ᒥᓂᔅᑕᐅᑉ ᑐᒃᓕᖓ ᐊᐅᓚᑦᑎᔨᒃᑯᓐᓂ ᑎᓕᔭᐅᓗᓂ ᑕᒪᐃᓐᓂᒃ ᑮᓇᐅᔭᓕᕆᓂᑦᒧᑦ ᐊᑐᐊᒐᑦ ᐱᓕᕆᐊᓐᓗ ᐱᒋᐊᑦᑕᖑᑦ ᐊᔾᔨᑦᓚᖑᓐᓗ ᒪᓕᒐᐃᑦ ᐊᐅᓚᑦᑎᔨᒃᑯᓐᓄᑦ ᑐᓂᔅᔪᑕᐅᔪᒃᑐᑦ ᐃᓱᒪᒃᓴᔾᔭᐅᔾᑕᐅᓂᐊᑦᓗᑎᒃ ᒪᓕᒃᑕᖕᒪᖕᒐᑕ ᖃᐅᔨᔭᐅᒋᐊᖕᑕᑦᓗᑎᒃ ᑐᕐᕋᐅᔪᒪᔪᓂᒃ ᐱᔾᔪᓐᓕᐊᑎᑦᑎᔪᒪᓂᒧᑦ ᑲᔪᓯᐅᒪ-ᐃᓐᓇᔾᑎᒃᓴᓂᒃ ᐃᓱᒪᒃᓴᔾᔭᐅᔾᑎᖕᑦᓗᑎᒃᓗ ᐋᖅᑭᒃᓯᔪᓐᓇᖕᒪᖕᒐᑕ ᐱᓕᕆᐊᖕᓴᖕᒥᒃ ᐅᓂᒃᑳᖕᑕᕋᔭᑦᑐᒥᒃ ᒥᓂᔅᑕᐅᑉ ᑐᒃᓕᖓᓄᑦ ᐊᐅᓚᑦᑎᔨᒃᑯᑦ ᑲᑎᒪᔨᖕᒥᓐᓂ ᐱᓕᕆᔨᖕᓴᓂᒃ ᓴᖅᑭᑦᑎᕐᓯᓗᒋᑦ ᑕᒪᑐᒥᖕᒐ ᐱᓕᕆᐊᖕᑐᖕᓴᐅᓂᐊᑦᑐᓂᒃ.

11. ᐊᑐᓕᕐᓯᔭᑦ ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᖕᒥᑦ ᐋᖅᑭᒃᓯᕐᓯᓗᒋᑦ ᐅᑭᐅᑦᑕᑦᑐᒥ ᐊᕙᓗᒥ-ᐅᑕᓕᕆᓂᑦᒧᑦ ᑐᓴᒐᖕᖕᖕᓴᖕᒥᒃ ᐃᑲᔪᑕᐅᖕᑕᑦᓂᐊᑦᑐᒥᒃ ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᖕᒥᓐᓄᑦ ᐊᓯᖕᒥᓐᓄᑦᓗ ᐃᓱᒪᓕᐅᓇᔭᐅᕙᑦᑐᓄᑦ ᓄᓇᑦᑎᐊᕐᒥ ᖃᐅᔨᓴᐃᑎᑦᓗᒋᑦ ᑲᔪᓯᐅᒪᐃᓐ-ᓇᔾᑎᒃᓴᓂᒃ ᐱᔾᔪᓐᓕᐊᔪᑎᒃᓴᓄᑦ ᐊᑐᐊᒐᑦᓄᑦ ᐱᓕᕆᐊᖕᖕᖕᓴᐃᑦ ᐊᑐᐊᒐᖕᒥᓐᓄᑦ, ᐱᓕᕆᐊᖕᓴᖕᒥᓐᓄᑦ ᐱᓕᕆᐊᓇᔭᖕᒥᓐᓄᑦᓗ.

12. ᐃᑲᔪᑐᐃᓗᑎᒃ ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᖕᒥᑦᑕ ᐱᔾᑲᓐᓂᔾᑎᒃᓴᖕᓂᒃ ᐊᐅᓚᑦᑎᔨ-ᒋᔭᐅᓗᑎᒃ ᐱᓕᕆᐊᑦ ᐱᔾᔪᓐᓕᐊᑎᑕᐅᓂᖕᒥᓐᓄᑦ ᐊᕙᓗᒥᐅᑕᓐᓗ ᓴᐳᓐᓂᐊᑦᑕᐅ-ᓂᖕᒥᓐᓄᑦ ᑐᓴᒐᒃᓴᓐᓗ ᓄᓇᑦᑎᐊᑦᒧᑦ ᐊᑐᑦᑕᐅᒋᐊᖕᑐᑦ ᐊᑐᐃᓐᓇᐅᑎᖕᑕᐅ-ᖕᑕᑦᓗᒋᑦ.

ᐊᓴᒪ ᒥᐊᓂᕆᓗᒋᑦ.

ᑲᑎᒪᔨᕐᓛᖑᑲᐃᓐᓇᑦᑐᑦ ᐃᒪᓐᓇᐃᓐᓇᔭᖕᒪᑕ:

13. ᐊᑐᓕᕐᓯᔭᑦ ᐊᕙᓗᒥᐅᑕᓕᕆᓂᑦᒧᑦ ᓈᓴᐃᓂᑦᒧᑦ ᐃᓕᖅᑯᓯᒃᓴᑦ ᐊᔾᔨᑦᓚᖑᑦ ᑮᓇᐅᔭᓕᕆᓂᑦᒧᑦ ᓈᓴᐃᒃᔪᓯᑦ ᐋᖅᑭᑦᑕᐅᖕᓯᓗᒋᑦ ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᖕᒥᓐᓂ.

14. ᐊᑐᓕᕐᓯᔭᑦ ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᖕᒥᑦ ᒪᓕᒐᖕᒥᒃ ᐋᖅᑭᒃᓯᕐᓯᓗᒋᑦ ᓴᖕᒥᓂᖕᖕᑦᑎᑦᑎᓂ-ᐊᑦᑐᒥᒃ ᒪᓕᒐᓕᐅᑦᑎᒃᑯᑦ ᑎᓕᓯᔪᓐᓇᕐᓯᓗᒋᑦ ᐊᕙᓗᒥᐅᑕᓕᕆᓂᑦᒧᑦ ᐅᖕᑲᐅᒃᔪᐃᔭᒃ-ᓴᒧᑦ ᒪᓕᒐᓕᐅᑦᑎᒃᑯᓐᓄᑦ ᐅᓂᒃᑳᖕᑕᕋᔭᑦᑐᒥᒃ ᑲᒪᒋᔭᖕᖕᓂᐊᑦᓗᓂ ᒐᕙᒪᒃᑯᑦ ᓴᑕᐅᕐᓯᓗᒋᑦ ᐊᐅᓚᑦᑎᓂᖕᒥᓐᓄᑦ ᓄᓇᒥᐅᑕᓂᒃ ᓴᐳᓐᓂᐊᑦᓂᖕᒥᓐᓄᑦᓗ ᐊᕙᓗᒥᐅᑕᓂᒃ ᓄᓇᑦᑎᐊᖕ.

15. ᐊᑐᓕᕐᓯᔭᑦ ᓄᓇᑦᑎᐊᑉ ᒐᕙᒪᒃᑯᖕᒥᑦ ᓴᖅᑭᑦᑎᕐᓯᓗᒋᑦ ᑭᑐᑐᐃᓐᓇᐃᑦ ᐃᓕᓐᓂᐊ-ᕈᑎᒃᓴᖕᒥᓐᓂᒃ ᐱᒃᔪᑎᒋᓗᒋᑦ ᑐᕐᕋᐅᔪᒪᔪᑦ ᐃᓕᖅᑯᓯᕆᔭᐅᔪᒪᔪᓐᓗ ᐱᔾᔪᓐᓕᐊᑎᑦᑎᓂᑦᒧᑦ ᑲᔪᓯᐅᒪᐃᓐᓇᕐᑎᒃᓴᓄᑦ.

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Natural resources are crucial to the future economic development of the Northwest Territories (NWT). A long-term economic development strategy for the NWT should recognize the economic importance of renewable and non-renewable resources but also that international forces such as commodity markets and the animal rights movement are powerful influences on natural resource development. The impacts of such forces are difficult to accommodate in an economic development strategy.

This report provides the Special Committee on the Northern Economy with an overview of key issues relating to resource development and environmental protection and makes strategic recommendations for consideration in preparing a long-term economic development strategy.

The Government of the Northwest Territories (GNWT) faces several important challenges in promoting environmentally sound resource development. The NWT is vulnerable to external economic forces and often lacks necessary infrastructure and a trained labour force. The development of renewable resources such as wildlife, fisheries and forests is constrained by the low biological productivity of northern ecosystems and pollution largely generated outside the NWT. Another challenge stems from the increasing population of the NWT, which is also generating growing demands for southern-style goods and services.

Competing visions of the NWT--frontier versus homeland, consumer society versus conserver society--remain difficult to reconcile in terms of resource development. But new opportunities for advancing community and regional involvement in planning for resource development have potential to bridge this gap.

The regulation of natural resource development in the NWT is complex and cumbersome and will likely become more so as the Dene/Metis and Tungavit Federation of Nunavut land claim agreements in principle are finalized. On the one hand, the GNWT's resource management responsibilities will increase with devolution, although finances and personnel to carry out these responsibilities may be limited. On the other hand, joint management boards, councils and aboriginal institutions established under the constitutionally entrenched land claims agreements will exercise considerable authority over wildlife, fisheries, land and water management and resource development projects. Devolution and land claims agreements will together shape if not determine the future role of the GNWT in resource development planning and management.

Sustainable development is proposed as an approach to reconciling the "environment versus development" debate. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Goals for achieving sustainable development of renewable (wildlife, fish, forests) and non-

renewable resources (oil, gas, minerals) are described. For renewable resources, these goals are to:

- protect the life-supporting capacity of northern ecosystems;
- preserve the genetic diversity of northern species; and
- ensure that renewable resources are used sustainably (not overharvested).

For non-renewable resources, sustainable development may mean:

- maximizing long-term as well as short-term benefits to communities affected by resource development;
- conserving non-renewable resources through efficient technologices and practices;
- increasing recycling and reuse of non-renewable resources and wastes from resource use; and
- eliminating adverse environmental impacts of operations.

Guiding principles for the preparation of sustainable government programs and policies are discussed in order to provide a framework for strategic long-term economic planning in the NWT. These guiding principles are as follows:

- recognize the environmental implications of economic policies and strategies;
- employ cross-sectoral approaches to overcome institutional obstacles;
- obtain the best information to support economic decisions; and
- respect community interests and priorities.

Finally, four strategies to achieve sustainable development, with recommendations for each, are proposed for consideration by the Special Committee on the Northern Economy. The Special Committe is urged, firstly, to adopt the goals and principles of sustainable development and to incorporate these goals and principles in its long-term economic development strategy.

The Special Commitee is urged to support current sustainable development initiatives in the NWT by the GNWT, aboriginal organizations and industry and to recommend the early appointment of a GNWT Round Table on environment and economy.

A comprehensive review of economic incentives programs in the NWT is recommended with a view to eventual elimination of disincentives to sustainable development and the creation of incentives favouring sustainable development. The Special Commitee is encouraged to recommend that the GNWT, industry and other resource users adopt sustainable practices.

To encourage an integrated approach to resources management, the Special Committee is urged to recommend that the mandates of GNWT departments include sustainable development goals and that the Deputy Minister of the Executive Council be charged with the responsibility of ensuring that all economic policy and program initiatives and related legislation submitted to the Executive Council for decision are consistent with sustainable development goals.

The Special Committee should also recommend the establishment of a northern-based environmental information system and that the GNWT make further efforts to streamline regulatory and information requirements for resource developments in the NWT.

To increase accountability for GNWT decision-making with respect to natural resources, the Special Committee is urged to recommend an internal environmental auditing system for the GNWT and that an Environmental Advisor position reporting to the Legislative Assembly be legislated. The Environmental Advisor would be empowered to conduct environmental reviews of resource policies, programs and projects and investigate and report to the Assembly on achievement of sustainable developmenmt goals by the GNWT. Public education programs to support community involvement in planning processes and to further the goals and practices of sustainable development are also recommended.

INTRODUCTION

INTRODUCTION

PURPOSE

The purpose of this Report is to provide the Special Committee on the Northern Economy with:

- an overview of challenges to natural resource development and environmental protection in the Northwest Territories (NWT);
- a description of the concept of sustainable development; and
- a strategy for taking a sustainable approach to long-term economic development in the NWT.

This Report represents the findings of one of a series of background studies developed to assist the Special Committee on the Northern Economy of the Legislative Assembly of the Northwest Territories in creating a long-term economic development strategy for the NWT. The other studies review issues related to training programs, impact of land claims settlements, the domestic economy, native employment - affirmative action policy and relevant territorial economic and development programs.

BACKGROUND

Resource development and environmental protection is of interest to the Special Committee on the Northern Economy because the potential for economic development in the NWT is tied to the use of diverse natural resources. The NWT possesses extensive and rare mineral deposits and sizeable oil and gas reserves that are expected to have increasing value in national and international markets. But the lands and waters of the Territory are also home to the mammals, birds, fish and plants that form the backbone of traditional and local economies. Conservation of wildlife and protection of the environment is widely recognized as the key to making the development of all these natural resources compatible.

As originally planned, this study involved a review of existing and evolving regulatory regimes for environmental protection and natural resource development in the NWT with a view to developing the basis for a comprehensive, coordinated environmental review process that would facilitate development of natural resources, promote a viable business climate and protect the environment.

Early work on the study soon indicated that the broader issues of development and environmental protection required clarification and political commitment before an effective attempt to streamline regulatory requirements could be undertaken. In a nutshell, these issues revolve around the goals of resource development and environmental protection in the NWT and the capacity of the Government of the Northwest Territories (GNWT) to achieve these goals.

Sustainable development is a concept that shows considerable promise as a central goal for economic and resource development in the North. It represents an environmentally sound approach: a way of meeting the diversity of present needs without compromising those of future generations.

Since the mandate of the Special Committee on the Northern Economy is to develop a long-term economic development strategy, it was agreed that the Consultants should enlarge the focus of the study to address these broader issues. The revised terms of reference thus require a review of the concept of sustainable development and the development of strategic recommendations concerning this approach to reconciling the interests of resource development and environmental protection. (Appendix A sets out the revised Terms of Reference.)

METHODOLOGY

Consultants were instructed to provide the Special Committee with an overview of the assigned topic in relation to other areas and the economy as a whole. Breadth of scope over detailed review was emphasized. Accordingly, this study is based on a wide range of materials.

Much has been written on resource development and the environment of the NWT--the fragility of the northern ecosystems, sensitivity of northern resource development to international markets, importance of cultural traditions and community involvement, practical difficulties in extracting the resources, and complex web of regulatory requirements. The literature on sustainable development in the North is not yet as rich because it is very much an evolving field.

This study has drawn from this literature--reports, papers, publications, policies and submissions developed by government, industry and advocate groups. The Consultants have relied on the most recent material available. In addition, the Consultants have surveyed relevant legislative and regulatory material including agreements in principle and proposed legislation. Appendix B provides a selected bibliography. **It should be noted that comments in this document do not represent legal opinions.**

This study has benefitted from interviews with individuals representing government, industry, aboriginal and environmental interests. The Consultants are indebted to these individuals for supplying valuable assistance in identifying current priorities and potential problem areas, supplying key reports and confirming facts and impressions. Appendix C provides a list of organizations and institutions whose representatives provided such assistance.

Many relevant developments are underway within the GNWT, federal government and aboriginal organizations. As this study was conducted over the winter of 1988-1989, much is unresolved at the time of writing and is so indicated where possible.

THE REPORT

To provide the Special Committee on the Northern Economy with an orientation to the issues involved, this Report is divided into three chapters. *Chapter I: Challenges* identifies key challenges for the GNWT in determining priorities and developing economic strategies, such as the influence of international markets, available natural resources, competing goals of development and jurisdictional constraints. *Chapter II: Meeting Present and Future Needs* introduces the concept of sustainable development and provides an overview of some of its practical implications. *Chapter III: Strategies for the Special Committee on the Northern Economy* offers specific recommendations for the Special Committee to consider in the development of its long-term economic development strategy.

In keeping with instructions, this Report involves minimal use of technical language and references. The *Selected Bibiography* (Appendix B) is divided in two to assist the reader in identifying sources. (Sources for Chapter I (challenges) are separate from sources for Chapter II (sustainable development).)

The observations and conclusions in this Report are those of the Consultants and in no way represent the views of the Special Committee on the Northern Economy.

I. CHALLENGES

I. CHALLENGES

A long-term NWT economic development strategy must respond to important challenges facing natural resource development and environmental protection. The strategy must:

- respond to the needs of an increasing population but recognize that the pace and quality of natural resource development in the North is constrained by external economic forces and unique circumstances of the northern environment;
- reconcile competing visions of development while respecting community and regional interests; and
- define a meaningful role for the GNWT given its limited authority to control resource development in the NWT.

This chapter offers an overview of these issues to provide a framework for determining strategic considerations for the Special Committee on the Northern Economy.

CONSTRAINTS ON DEVELOPMENT; GROWING NEEDS

The economic development of the NWT is clearly dependent on the use of its natural resources. This section makes two points about these resources and their use. These are:

- the development of renewable (wildlife, fisheries, forests) and non-renewable (oil, gas, minerals) resources of the NWT is constrained by economic and environmental factors ; and
- the growing population of the NWT is placing unprecedented demands on renewable resources.

Economic Constraints

The wage economy of the NWT not dependent on government depends on the development and export of natural resources (lead, gold, fur) to markets in southern Canada, the United States and Europe. But the distances from the NWT to these markets are great, so transportation costs tend to be higher. Production costs are also generally higher because necessary infrastructure (roads, services) and trained local workers are often lacking.

For most non-renewable resources then, the NWT must be viewed as a marginal source of supply. If prices of resources such as oil or lead prices fall, the high-cost suppliers, such as those in the NWT, are likely to be the first to be shut down. This, in turn, slows down activities in other sectors.

A long-term NWT economic development strategy must recognize that the NWT economy is vulnerable to economic forces, such as fluctuations in natural resource prices, that are beyond its control. The NWT economy is probably even more vulnerable than other resource-based economies, such as those of Alberta and British Columbia. This limits the potential impact of the economic development strategy itself.

Finally, the renewable resource sector is also highly subject to international economic and social forces. The collapse of the NWT sealing industry due to the European Community ban on imported seal products and recent initiatives in Europe against the fur trade exemplify how the NWT renewable resource economy can be affected by international trends.

Environmental Constraints

Natural resources are limited in quantity and by other environmental factors such as pollution. For non-renewable resources such as petroleum and minerals, the limits are clear. Oil fields eventually stop producing oil; mines close once the veins of desired ore are depleted. But the physical limits of non-renewable resources are less significant than economic limits, such as international resource prices or technological limitations.

Renewable resources, such as wildlife, fisheries and forests, are limited by such factors as quantity and quality of habitat. Northern forests and tundra are relatively unproductive biologically because of cold temperatures, permafrost and thin soils. So economically important species such as caribou require vast territories to maintain their populations.

Fish and other organisms in the cold, nutrient-poor lakes and seas of the north also grow more slowly than species further south. This slow growth means that the sustainable level of harvests is low.

While the NWT is a vast place with few human inhabitants, the capacity of the land and waters to produce the renewable resources upon which many Northerners depend is limited. The limited capacity of the land and waters to produce wildlife and fish may eventually restrict the population growth of individual communities and the NWT as a whole.

Impact of Industrialization

The wildlife and fisheries of the NWT, and Northerners' use of these resources, face new constraints. These constraints--pollution, global warming, the depletion of the ozone layer--are being caused by industrial activities mainly located outside the NWT.

The discovery of alarmingly high levels of PCBs in the milk of Inuit mothers in northern Quebec is a recent example of the growing reach of industrial pollution from the south. Seal and beluga meat eaten by the Inuit is the source of these PCBs. If concentrations of this chemical reach hazardous levels, Inuit mothers may be advised to stop eating these nutritious local foods and rely on imported high-cost foods from the south. Losing traditional food sources would have dramatic impacts on economic and cultural life in the communities concerned.

More difficult to assess are the threats posed by the hole in the ozone layer over the Arctic, the Arctic haze phenomenon, and global warming associated with increasing concentrations of atmospheric carbon dioxide caused by burning of oil, gas, coal and wood around the world. Global warming is of particular concern for the North because temperatures are expected to rise more dramatically than further south. Impacts on the habitats and migration of wildlife and the economies based on them are difficult to predict. Similarly, the changes in permafrost and sea-ice seasons will create different technological challenges.

Development of oil and gas by circumpolar neighbours and in the Mackenzie Delta, Beaufort Sea or Lancaster Sound regions pose additional pollution threats. In Alaska, a recent study has found that after a decade of operations, the Prudhoe Bay oil fields have created disturbing environmental problems, including pollution of air and water as well as significant landscape damage covering many hundreds of square kilometers of the Arctic coast. Restoring these industrialized areas has not yet been shown to be technically or economically feasible over the long term, and industry predicts extemely high restoration costs.

Increasing Demands on Resources

The diversity of the NWT population means that traditional as well as southern lifestyles demand support. And Northerners are now demanding more--more opportunities in the wage economy, better health care, more consumer goods and services.

The increasing pressure to bring southern lifestyles and comforts to the North creates greater demands for resource development to create jobs to provide the revenues to pay for these goods and services. But this also brings southern environmental problems--pollution of air and water, garbage, industrial wastes, not to mention social problems.

Many fundamental needs, however, must still be met with local resources if living in the North is to continue to be affordable for most Northerners. Reliable sources of food and water fall clearly in this category and are often taken for granted because they have been sufficient in the past.

Growing Population

The NWT is home to a growing population that wants to stay in the North and provide for future generations of Northerners. Some population groups are growing at a rate of three times the national average. While much of this growth is concentrated in the larger centres of Yellowknife and Iqaluit, smaller communities such as Rankin Inlet and Fort McPherson are also growing. The population of Lancaster Sound is expected to double in the next 25 years.

Growing populations place increasing demands on the wildlife and marine life that support many communities. There will also be increased demands for sources of energy, water supplies for domestic and commercial use, and materials for housing. In addition, the impact of human activities in and around communities, such as the increased production of wastes, in turn, will further stress vulnerable ecosystems (that is, the environment and living organisms on which life depends).

The significance of a growing population for economic planning in the NWT tends to be overlooked because the NWT is so large and the population small and scattered. And compared to other regions of Canada and the world, local food, water and other resources have been uncontaminated and plentiful. But given the high costs of providing for the diverse needs of Northerners, and the limited capacity of the land and waters to provide renewable resources, population growth must be regarded as an important factor in economic planning.

Conclusion

The GNWT faces a profound economic challenge in responding to the growing needs and expectations of an increasing and culturally-diverse population in communities scattered over a huge territory. This challenge is complicated by the considerable lack of control of the GNWT over the markets for its natural resources and by threats to the northern environment from industrialization outside and inside the NWT. A long-range economic development strategy must acknowledge these economic and environmental constraints, yet plan for those aspects of the NWT's economic future over which the GNWT does have control.

COMPETING VISIONS

The debate over development of northern natural resources began in earnest in the late 1950s with the "vision" of then Prime Minister Diefenbaker to open up the North for development through a vast road construction program. In the 1970s, the controversial debate over the proposed Mackenzie Valley pipeline mobilized entire NWT communities and commanded the attention of the nation.

Since the pipeline debate, the competition between different visions of development has changed rapidly. Opportunities for shaping and accommodating these different visions are increasing. This section looks at these issues and the significance of these changes for long-term economic planning in the NWT.

Old and New Debates

The debate over northern resource development has been about competing visions, about what the riches of the North really are and about what stresses the northern environment can withstand. At one end of the spectrum, a vision of the North as sanctuary, a last untarnished and untamed landscape preserved from development. At the other end, a vision of the North as new territory for southern-style industrial development, based on extensive exploitation of the unique mineral deposits and sizeable gas and oil reserves.

The 1977 Report of the *Berger Inquiry* described the debate as between those who saw the North as a homeland and those who saw the North as a frontier. In 1989, these competing visions may seem simplistic because the debate has continued to evolve. The benefits of environmental protection and resource conservation as well as those of economic development of non-renewable resources are all widely recognized by Northerners. Integrating the modern economy to accomodate traditional pursuits has become a common concern.

As the northern economy is integrated with that of North America and the world under global trade liberalization, the debate about northern resource development may come to mirror that taking place elsewhere. These visions of development are:

- development that supports a society driven by demands for new and greater choices in consumer products and services (a "consumer society"); and
- development that seeks to maintain or improve the quality of life through efficient and wise use of natural resources (a "conserver society").

An underlying difficulty in assessing competing visions is the measurement of economic and social benefits flowing from the use and availability of some resources. For instance, it is easier to place a price tag on the value of a mining development that creates jobs and generates profits and tax revenues than on the value of a protected watershed, wildlife sanctuary or cultural tradition.

Battlegrounds

Over the years, the competing visions for and against various development strategies have been challenged and defended in public hearings, business and economic development conferences, regional advisory groups and community meetings as well as behind the closed doors of government and industry. Specific proposals for development subject to environmental impact assessment procedures, such as the Mackenzie Valley Pipeline, have provided the occasion for extensive community, industry and government involvement.

Regulatory environmental impact assessments play a key role in development when required for the approval of permits, licences and lease applications necessary for most resource development projects. These procedures have allowed the public (aboriginal organizations, community members, environmental advocates) some opportunity for comment on development priorities. Proposed oil and gas developments have received the most attention; mining projects, on the whole, have been spared public scrutiny with the notable exception of the proposed uranium mine at Baker Lake.

Although these regulatory procedures are important in controlling the pace and quality of development, they are project-specific and thus have limited impact. In addition, over the years, they have been faulted for inadequate treatment of territorial and community priorities. In part, such shortcomings are unavoidable if regulatory procedures are used as the primary means for determining basic questions of long-term resource and community development policy. Environmental impact assessments of specific projects were not designed--and cannot be expected--to reconcile the many issues underlying competing visions about development in the North.

New Opportunities

Over the last few years, regional land use planning has provided a new opportunity to address concerns raised in environmental assessment proceedings. Land use planning is designed to head off many of the conflicts that have plagued resource development initiatives by identifying resources, development potential, community aspirations and environmental constraints before industry or government makes significant investments and expectations are raised.

The regional focus of these planning exercises is especially important in the NWT because of the great variation in resource potential and cultural traditions among regions. Three regions are involved in this process. The proposed plan for Lancaster Sound has been completed and will be reviewed and updated in five years. The plans for the Mackenzie Delta-Beaufort Sea Region and the Denendeh Region are underway.

The Lancaster Sound Proposed Land Use Plan has evolved with the involvement of government, industry and community representatives. The Plan articulates a vision of development that will meet community needs and respect the limitations of the environment--the vulnerability of wildlife and marine life to human activities. When approved, the Plan will have the status of a government policy and provide guidelines to any developer or government agency that has an interest in the area.

The evolution of regional authorities and more recently the emphasis by the GNWT on the role of the community (prime public body concept) represents a recognition of the need for a more flexible approach to resource and community development than in the past. Developing effective institutions will support meaningful involvement of and response to community interests.

The establishment of resource management boards and councils under land claim agreements will provide additional opportunities for aboriginal peoples to influence resource development strategies. These institutions coupled with the experience gained from other government activities (environmental impact assessment hearings, Development Impact Zone groups, community and regional committees and councils) add to the capacity of Northerners to shape locally appropriate development goals, strategies and projects.

Conclusion

A long-term economic development strategy must attempt to create a coherent approach to reconciling competing visions of development. This is especially important for the GNWT in determining the type of role it wishes to play in devising natural resource development programs, legislation, and community and regional strategies.

Such an approach must be endorsed at the political level of the GNWT. Environmental assessments of projects and land use planning are invaluable at local or regional levels, but are not designed to establish or clarify territorial goals and policies. Long-term political commitment by the GNWT through policies, legislation and institutional support (including increased coordination with affected jurisdictions such as the federal government) is necessary to provide a basis for reconciling visions of development in a manner appropriate for Northerners.

INCREASING AUTHORITY -- INCREASING CONTROL ?

The regulation of natural resources in the NWT is complex and cumbersome. The overlapping policies and regulatory requirements for the conservation, protection and development of renewable and non-renewable resources by federal and territorial authorities have been a source of frustration for government, industry, aboriginal groups and environmental advocates.

The evolving role of the GNWT creates further complexities for at least three reasons:

- the federal government owns and controls most of the natural resources in the NWT (south of 60, the provinces own and control most public lands and resources);
- the authority for resource management that is being transferred from the federal government to the GNWT brings with it significant limitations; and
- the land claims agreements have or will constitutionally entrench additional resource management regimes for settlement areas.

This section supplies an overview of the existing and evolving regulatory framework for resource development and environmental protection. It must be appreciated that the regulatory regimes concerning the development of resources such as oil and gas, minerals, fisheries and wildlife are quite different. However, the issues facing management of non-renewable resources are similar to those concerning the management of renewable resources; these are central to determining the role that the GNWT can play in long-term economic development.

Existing Authority

The Federal Role

Resource development and protection of the environment in the NWT are primarily matters of federal responsibility. In large part, this is due to the federal government's unique role as "landlord of the north", that is, its ownership of Crown lands, which currently comprise 97% of the Territories.

In this capacity, the federal government, through its departments and agencies, has final decision-making responsibilities for the development of minerals, oil and gas and uses of land and water (primarily the Minister and Department of Indian and Northern Affairs). The responsibilities include:

- the use of federal Crown lands (including mining), regulated under the *Territorial Lands Act;*
- uses of water under the *Northern Inland Waters Act*; and
- oil and gas under the *Canada Petroleum Resources Act* and the *Oil and Gas Production and Conservation Act*. (The Canada Oil and Gas Lands Administration (COGLA) administers these two statutes.)

In addition are federal concerns that apply to all regions of the country. Federal environmental legislation includes such activities as:

- regulating sea coast and inland fisheries and protecting fish habitat (*Fisheries Act;* Department of Fisheries and Oceans);
- regulating the hunting of migratory birds (*Migratory Birds Convention Act;* Department of Environment); and
- controlling the import, manufacture and use of toxic chemicals (*Canadian Environmental Protection Act;* Department of Environment).

The federal government also has authority for interprovincial and international concerns, such as:

- regulating energy exports and pipeline development (*National Energy Board Act*);
- setting standards for shipping in Arctic waters (*Canada Shipping Act, Arctic Waters Pollution Prevention Act*); and
- negotiating international agreements in matters such as trading rights and duties (*Canada - United States Free Trade Agreement*), acid rain, and management of caribou that migrate across international boundaries (*International Agreement for the Conservation of the Porcupine Caribou Herd*).

The Territorial Role

The GNWT functions much like provincial governments and has many powers similar to the provinces by virtue of the federal *Northwest Territories Act* (although such powers are subject to this statute and other federal laws). These include taxation for territorial, municipal or local purposes, licensing of businesses, property, civil rights and all matters of a local or private nature, as well as some specific territorial powers, such as the preservation of game and the levying of taxes on furs.

Territorial laws are limited in two important ways. Territorial legislation:

- cannot conflict with federal legislation or interfere with the federal rights in, and uses of, federal Crown land; and
- has limited geographic application within the NWT, that is to Commissioner's lands, municipalities and privately held property. However, territorial laws do apply to certain private activities on federal lands.

Within these constraints, the GNWT is responsible for such activities as:

- wildlife (*Wildlife Act*);
- forests (*Forest Protection Act, Forest Management Act*); and
- Commissioner's lands, municipalities and privately held property (*Commissioner's Lands Act, Area Development Act, Planning Act*).

Current territorial environmental protection legislation includes the *Environmental Protection Act, Pesticide Act* and *Transportation of Dangerous Goods Act*. The proposed *Environmental Protection Act*, tabled November 7, 1988, will repeal the *Environmental Protection Act* and the *Pesticide Act* and provide comprehensive pollution control regulation. The principles proposed for GNWT environmental protection policy include assertion of territorial authority over the control of all pollutants--from their introduction into the environment until their removal or disposal. Recognizing the scope of federal authority, the policy supports a "single window" approach to avoid duplication of regulatory requirements.

The GNWT plays an important role in assisting federal authorities in managing resource development and environmental protection, participating on a number of advisory and technical committees. This includes representation on committees such as those concerning approvals of land use permits (Land Use Advisory Committee), land leases (Federal-Territorial Lands Advisory Committee) and water licences (NWT Water Board Technical Advisory Committee). The GNWT also assists federal authorities in enforcing environmental and resource management programs (*Migratory Birds Convention Act, Fisheries Act*).

The GNWT is also active in resource development management through involvement in land use planning. In addition, the GNWT identifies development potential, sponsors community and regional consultations and monitors development activity and environmental quality despite its limited legislative authority through policies such as those concerning tourism, minerals, resource development, renewable resource use and compensation.

The key GNWT departments involved in resource development and environmental protection are the:

- Department of Renewable Resources, which manages wildlife and forests and is responsible for environmental protection within the confines of territorial jurisdiction;
- Department of Energy, Mines and Petroleum Resources, which is developing the territorial management role for non-renewable resources (minerals, oil and gas) and coordinates territorial involvement in development project assessments; and
- Department of Economic Development and Tourism, which promotes and assists business development, encourages and promotes a diversified economy and the development of the tourist industry (including parks).

Regulatory complexities: environmental impact reviews

The complexity of the regulatory requirements for resource development is evident from even a brief overview of the environmental impact assessment procedures required for project approvals. For it is in deciding whether or not to approve permits, leases, licences or certificates that the range of federal and territorial interests become involved. Approval committees may have representatives from various federal and territorial agencies looking at such concerns as the impact on fish habitat, wildlife breeding grounds, migratory birds as well as at community priorities.

Assessment of the environmental impact of specific projects vary depending on the nature and scale of the project. For instance, for federal Crown lands, no land use permit is required and no assessment is undertaken for minor activities such as hunting, fishing, prospecting or locating a mineral claim that requires no heavy machinery. For mine development, oil and gas exploration or production, highway construction and other major projects, however, land use permits, as well as leases and water licences where applicable, are required by the federal authorities.

The GNWT has its requirements for projects to ensure that territorial priorities are met. These are set out in such policies as the Resource Development and Renewable Resource Compensation Policies. The scale and scope of the involvement of the GNWT and the Departments of Renewable Resources, Energy, Mines and Petroleum Resources and Economic Development and Tourism is determined by the nature of the project rather than by an overall common framework for resource conservation and development.

For major resource development projects, such as most oil and gas projects, a full-scale public environmental impact review may be required. This is coordinated by the Federal Environmental Assessment and Review Office (FEARO), which reports to the federal Minister of the Environment. Federal responsibilities for marine life (Department of Fisheries and Oceans), transportation standards (Department of Transport) and northern employment (Employment and Immigration Canada) are also relevant.

Some major projects require additional regulatory reviews. A pipeline project must be approved by the National Energy Board and uranium mines require approval of the Atomic Energy Control Board.

Industry has complained that duplications of regulatory requirements of the federal and territorial governments, inconsistent application of policies and standards and the administrative complications create obstacles to timely development. Uncertainties arise from conflicting or duplicated information requirements and operational standards. Inefficiencies in the approval processes are said to lead to delays and higher development and operational costs, although these claims are met with some skepticism by the environmental community.

Industry thus has advocated some streamlining of the process and has promoted the creation of "single-window" regulation or "one-stop shopping" for the approval of the permits, leases and licences necessary for project developments. The call for clarifying the rules of the game has become stronger in the wake of further uncertainty caused by the devolution process, land claims negotiations and the unresolved issue of territorial division.

Evolving Authority

Devolution and Constitutional Development

The GNWT is currently negotiating the transfer of increased legislative and administrative authority (devolution) for natural resources management from the federal government. To date, forest management has been transferred and the delegation of inland fisheries management responsibilities to the GNWT is being actively negotiated. The authority necessary for the management of land, water, minerals, oil and gas, environment generally and land use planning also have been identified for eventual transfer to the GNWT.

The *Agreement in Principle for the Northern Accord* represents another step in the evolution of territorial authority. The *Northern Accord* provides for the transfer to the GNWT of the authority to dispose of specific oil and gas rights, determine and administer oil and gas resource revenues (such as royalties, bonus payments, rentals and licence fees), regulate on-shore oil and gas exploration, development and production activities and manage territorial benefit programs. (Off-shore oil and gas management is to be shared by the federal and territorial governments under an agreed regime.)

As legislative authority is devolved, the GNWT will acquire some additional fiscal and administrative resources (funds and person-years). But these resources will not be as great as those that have been dedicated to northern resource management in the past. Federal departments face cutbacks in budgets and personnel to meet the government's priority of a reduced deficit. Further, federal budgets and personnel are needed for activities that will not be devolved in any case (marine resources, National Energy Board) and for commitments arising from land claim settlements and the *Northwest Territories Act*.

The adequacy of the resources available to the GNWT is in doubt, although the *Northern Accord* is designed, in part, to soften the financial blow of devolution by providing that the GNWT will be entitled to revenues from oil and gas development and offset payments. (The diminished interest of the Yukon government in devolution is related to concern about the adequacy of resources to be transferred from the federal government.) The practical effect of devolution for the GNWT may be increased authority but limited administrative and fiscal resources to exert that authority.

The prospects for the GNWT achieving a complete array of provincial-type powers over resource management appear slim. This is not just due to the continuing uncertainty over the constitutional development of the NWT (one territory or two ?) as evidenced by a recent discussion paper tabled in the Legislative Assembly (*Political and Constitutional Development in the Northwest Territories*).

The fact that the Inuvialuit Final Agreement and the Dene/Metis and Tungavik Federation of Nunavut (TFN) agreements in principle have given, or will soon give, settlement beneficiaries significant control over resource management will provide constitutional challenges that no province has yet had to contemplate seriously. Devolution and the constitutional development of the NWT is directly tied to evolving self-government issues.

Land Claim Agreements

The Inuvialuit Final Agreement and the Dene/Metis and TFN agreements in principle have established, or will establish, regional aboriginal agencies (such as the Inuvialuit Regional Corporation) with considerable financial resources as well as authority over resource management. Among other things, the agreements address surface, sub-surface and access rights issues, royalty benefits and project development requirements.

In addition, joint boards for wildlife, fisheries, land and water management, land use planning and environmental impact assessment and review have been or will be created. The relevant aboriginal organization is entitled generally to appoint one-half the members of these boards, federal and territorial governments the other half.

Under the Dene/Metis and TFN agreements in principle, these boards have decision-making authority over management of resources such as wildlife, land and water. The GNWT has limited authority to review or reverse these decisions. In effect, the institutions established under the agreements limit the authority of the GWT to manage natural resources.

Each agreement is unique in its emphasis on these and related resource issues but all establish a framework for direct management by settlement beneficiaries. The land claims agreements can only be amended through the consent of the federal government and the aboriginal organizations involved. The GNWT must recognize that the expanded role of aboriginal people in managing resource development under the land claims agreements is or will soon be constitutionally entrenched and thus must be accommodated.

The implications of the land claims agreements for the GNWT are under active study by the GNWT. Two points are clear. First, the GNWT is legally obliged to share much of its evolving power with the institutions created under the agreements.

Second, there is likely to be even more overlap and duplication in managing natural resource development unless the GNWT and the land claims institutions actively cooperate. A pipeline up the Mackenzie Valley from Inuvik to the Alberta border may be subject to environmental impact assessments and review by the Inuvialuit and the Dene/Metis as well as by federal and territorial governments. Under the Inuvialuit Final Agreement, the Inuvialuit could hold their own review proceedings if they felt that federal or territorial reviews were inadequate. Within Nunavut, the TFN agreement in principle also provides for environmental impact assessment of development projects with environmental significance.

The process of defining the respective roles of the GNWT and institutions established under the land claims agreements will differ for each settlement region. For example, while it may be reasonable to expect the Dene/Metis to consider merging management functions assuming native representation is protected, the same cannot be said of the TFN, which seeks to create the separate territory of Nunavut.

Recognizing the importance of developing a workable regulatory framework, the GNWT Departments of Renewable Resources and Energy, Mines and Petroleum Resources are hosting a seminar in April to identify the concerns of all stakeholders (the GNWT, the federal government, aboriginal groups, industry representatives and public interest groups) concerning issuance of permits and licences. This is a crucial step in addressing the competing interests of the GNWT and aboriginal groups concerning authority over resource development issues.

Conclusion

Even after devolution is completed, the authority of the GNWT over resource management will be limited by land claims agreements and continued, if diminished, federal responsibilities in the NWT. Without the co-operation of various federal and aboriginal agencies, the GNWT cannot control the pace and quality of development or even streamline administrative requirements for the issuance of development permits. Within the GNWT, any competing or conflicting approaches will undermine the contributions that the GNWT can make.

However, the GNWT is the only government that speaks for the entire territory. As such, the GNWT speaks with a moral authority that transcends its limited legal powers to enact resources legislation and develop programs. The importance of this moral authority--a source of power--should not be overlooked in creating strategies for resource management and environmental protection.

II. MEETING PRESENT AND FUTURE NEEDS

II. MEETING PRESENT AND FUTURE NEEDS

This chapter provides an introduction to the concept of sustainable development--definitions and, goals and guiding principles to achieve sustainable development of renewable and non-renewable resource development. The examples used have been selected and developed to further discussion of northern resource issues and priorities.

As a subject of study, sustainable development is evolving rapidly--definitions, principles and goals are being actively debated by governments, industry and public interest groups. The discussion in this chapter highlights considerations that may assist the GNWT in reconciling visions of development within environmental constraints.

SUSTAINABLE DEVELOPMENT

Background

The term sustainable development first received widespread recognition with the publication of the *World Conservation Strategy* in 1980. Since that time, sustainable development has been featured as the central theme of the report of the World Commission on Environment and Development (Brundtland Commission) and has received widespread support in Canada.

The National Task Force on Environment and Economy, composed of senior representatives from government, industry and the environmental community, adopted the principle of sustainable development as the basis for its recommendations to the Canadian Council of Resource and Environment Ministers (CCREM). The cornerstone of the Task Force's report (which has been endorsed in principle by Canada's First Ministers) is the recognition of the importance of a healthy environment to a sound economy.

In the North, sustainable development has been reviewed and discussed in various contexts. For instance, the Inuit Circumpolar Conference and the Lancaster Sound Proposed Regional Land Use Plan have incorporated the concept in their development strategies. The recent Federal-territorial Economic Development Agreement reflects sustainable development priorities. Within the GNWT, an interdepartmental working group (Departments of Renewable Resources, Economic Development and Tourism, and Energy, Mines and Petroleum Resources) is working on the development of a sustainable development policy.

What is Sustainable Development?

Sustainable development is a unifying concept that describes environmentally sound development. While the use of this specific term is recent, the concept has been central to the traditions of those whose survival has depended on the wise use of natural resources. Sustainable development can be thought of as a rediscovery of truths industrialized societies had forgotten: this planet can survive without us but we cannot survive without its life-support systems.

The Brundtland Commission described sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The GNWT interdepartmental working group on sustainable development uses another definition that emphasizes the potential for compatibility between conservation and development: " a form of social and economic growth which harmonizes conservation and development goals".

Definitions of sustainable development vary, indicating that the term has different meanings for different people. This leads skeptics to question the usefulness of the concept or dismiss it as a fad. To some, sustainable development represents an anti-development strategy in flimsy disguise. To others, it appears to be a dangerous compromise with those who have historically demonstrated little respect for the natural world or aboriginal peoples.

However, the concept of sustainable development represents a timely reassessment of the "environment versus development" debate by addressing two basic facts:

- many current economic policies and development activities cannot be continued over the long term without causing irreversible damage to the life-supporting capacity of the planet; and
- continued economic development of some kind is necessary to bring prosperity to those in poverty.

Sustainable development challenges existing economic structures and practices and demands a fresh look at the definition of economic "success". Sustainable development redefines economic winners to include those whose activities maintain or improve environmental quality and to exclude those who ruin the potential for resource use by future generations.

Environmentally sound development does not mean preserving nature beyond the reach of human needs. It is recognized that exploitation of natural resources is essential to meet many social and cultural needs as well as those basic to survival. The Brundtland Commission identified poverty as a major cause of poor resource management. The immediacy of meeting basic survival needs (food, water, shelter) often limits the ability of governments to save resources for the future.

The Lancaster Sound Proposed Regional Land Use Plan's vision of sustainable development is "through the conservation of the Region's natural and cultural resources, the estab-

lishment of protected areas, and the promotion of self-reliant, long-term, sustainable economic growth in both renewable and non-renewable sectors." Specifically, the Plan states that:

> The Commission believes that renewable and non-renewable resource development projects within the Region should proceed in phases, with strict environmental controls, maximum regional benefits, and when necessary, only after demonstration projects and research have proven that the available technology meets government standards and addresses community concerns.

The recent federal review of energy options ("Energy and Canadians: into the 21st century") adopted the principle of sustainable development in the following way:

> By sustainable economic development, however, the Committee does not mean simply reserving existing resources for future generations. Rather, it indicates the obligation to manage all existing resources now to enhance our options, thereby favouring future generations with capital, an educated labour force, technology and resource-base mix that will yield a potential for per capita economic prosperity at least as great as Canadians currently enjoy. It means development, but not at any cost: development that does not poison the atmosphere, destroy the environment, deal arbitrarily with people, or, waste resources, thereby precluding future generations from realizing economic opportunities similar or superior to those enjoyed today.

These two visions of sustainable development illustrate the balancing of conservation and development goals to meet the needs of today and provide for those of tomorrow.

GOALS OF SUSTAINABLE DEVELOPMENT

Renewable Resources

The *World Conservation Strategy* sets out three goals (objectives) to ensure sustainable development of living resources, such as fisheries, forests and wildlife. These are:

1. Maintenance of essential ecological processes and life-support systems (by not irreversibly disrupting climate, the ozone layer, forests).

2. Preservation of genetic diversity (by preventing species extinctions and protecting healthy gene pools within species).

3. Sustainable utilization of species and ecosystems (by harvesting within the limits of production capacity).

Whether for forests, wildlife or fisheries, legislators and resource managers must ensure that:

- the diverse roles of forests, tundra, lakes , rivers and other habitats supporting life are protected;
- the full range of diversity among and within species is preserved to enable greater resistance to disease and permit healthy regeneration; and
- these resources are not overharvested.

The National Forest Sector Strategy for Canada comes close to summing this up for forests in recommending that forest management "focus on maintaining the long-term dynamics of healthy, stable and well-balanced forest ecosystems." The current emphasis on maximizing harvest potential--quantity of yield--must be balanced by such qualitative concerns.

Similar considerations apply to wildlife harvesting. Maximizing harvest potential may not be sustainable over the long-term. The emphasis has to be on determining the best use of these resources within the limitations imposed by the biology of the species and the quality of the habitat.

The Task Force on Northern Conservation employed these three conservation goals from the *World Conservation Strategy* in recommending a northern conservation strategy, endorsed by the GNWT in 1985. As the Department of Renewable Resources began to develop a NWT Conservation Policy, the release of the Bruntland Report and the National Task Force on the Environment and Economy in 1987, influenced the shift of this work to include economic development issues and the concept of sustainable development. As a result, the Inter-departmental Working Group on Sustainable Development was formed in 1987 to address these broader concerns.

Non-renewable Resources

Sustainable development has different implications for non-renewable than for renewable resources. It does *not* imply that mineral or petroleum resources should not be used because such use reduces availability for future generations. But sustainable development does imply wise use of these resources.

Current thinking about how the sustainable development approach applies to non-renewables is indicated by the following goals:

1. Maximizing long-term as well as short-term benefits to communities affected and involved with resource use and development.

2. Conservation of non-renewable resources through energy efficient technologies and practices.

3. Increased recycling and re-use of mineral resources and industrial wastes.

4. Elimination of adverse environmental impacts in the exploration, extraction, production, processing and transportation of oil, gas and mineral resources and products.

Long-term community benefits can be maximized by extending, where market demand is favourable, the period of development activity through carefully planned phases to enable maximum community participation and adequate environmental monitoring.

The revenues from development activities can be turned into long-term community assets through the creation of heritage trust funds (as has been done in some oil and gas-producing provinces and states). These assets can also be used to support related goals of sustainable development such as development of new environmentally sound energy sources and technologies. Similar funds could be set up with revenues from mining projects to provide incentives to industry to develop recycling technologies or reward high standards of environmental protection.

To achieve sustainable development goals, the mining industry must adopt the "cradle-to-grave" philosophy for managing a mining project throughout its life. Elements of the cradle-to-grave approach include:

- recognizing and documenting potential environmental risks at all stages of a mining project--exploration, construction, operation, processing, transportation, mine closure and abandonment;
- aiming for "zero discharge" (no discharge) of contaminants in all activities and certifying these efforts on mine closure;
- creating new environmentally sound technologies and new products through recycling of mining products and from "wastes" for use by other industries; and
- revising accounting methods and financing to take into account these additional costs and revenues.

Governments must support these initiatives through development of appropriate tax incentive or credit programs as well as funding of appropriate research. In addition, governments must enforce strict environmental standards and safeguards and monitor the impact of mining activities on the surrounding communities and renewable resources.

Member firms of the Mining Association of Canada are committing $4 million to a research program to discover effective and permanent solutions to the problem of acid mine drainage ("MEND" - "Mine Environment Neutral Drainage" program). Spin-off benefits are expected to include reduction of mine rehabilitation costs and creation of new business opportunities as well as new technologies for export to other countries.

In the oil and gas sector, similar approaches are required. These include greater emphasis on energy conservation, development or substitution of supplementary environmentally sound energy sources to make better use of the limited supply of fossil fuels and enforcement of strict environmental standards on all related activities--exploration, extraction, processing and transportation--to reduce the adverse impact of oil and gas development on other natural resources.

To encourage high standards of operation, the Canadian Petroleum Association has produced an *Environmental Code of Practice*, a set of principles to guide industry approach to oil and gas development. The policy statement of this Code reads:

> Companies are committed to protecting the environment and to maintaining public health and safety during all phases of operation of the petroleum industry. They do so on behalf of their shareholders and employees, and on behalf of present and future Canadians.

These goals for renewable and non-renewable sustainable development create a framework for long-term economic planning and require a new approach to policy and program development.

GUIDING PRINCIPLES FOR ACHIEVING SUSTAINABLE DEVELOPMENT

Sustainable development is a new economic vision. Integrating the goals of sustainability with other factors affecting economic development (availability of capital, reliable markets, trained labour force, transportation infrastructure) and relating these to different natural resource sectors in the NWT presents different challenges for each sector.

The links between the economy and the environment vary from sector to sector, as do the institutional obstacles. Information requirements of decision-makers as well as the priorities and needs of local communities also differ. A sustainable approach for a resource development project in one community is not necessarily appropriate for another project in another community. In the NWT, the great variation in resources and community needs among regions underlines the importance of adjusting sustainable development strategies to fit region and community.

This section identifies four principles to assist decision-makers and policy-makers in arriving at sustainable approaches to economic development. These guiding principles can be thought of as analytic tools for preparing a long-term economic development strategy. These principles are:

1. Recognize the environmental implications of economic policies and strategies.
2. Employ cross-sectoral approaches to overcome institutional obstacles.
3. Obtain the best information.
4. Respect community interests and priorities.

1. Recognize the environmental implications of economic policies and strategies

Sustainable development is founded on the recognition of the close link between economic development and environmental conservation. Economic policies on the one hand, and environmental policies on the other, cannot be developed in isolation as if they had no relation to each other. The following illustration shows how economic policies and programs can affect environmental quality.

The NWT relies heavily on petroleum products. Diesel oil generators produce electricity, gasoline powers cars and trucks and fuel oil heats homes and offices. But the burning of these fuels causes local air and noise pollution as well as garbage in the form of abandoned fuel drums.

Oil is preferred to other energy sources by consumers because of low cost, the convenience and availability of petroleum and a lack of alternatives. (Some communities really have no reasonable alternatives.) But consumers in the NWT do not bear the full cost of using oil. The GNWT subsidizes the cost of oil by acting as a supplier of petroleum to remote communities.

This general economic policy of subsidizing largely imported petroleum products, however, acts as a disincentive to the development of alternative energy sources and to energy conservation. Development of energy conservation and alternate fuels holds promise as an economic strategy for some parts of the NWT.

A recent report on import substitution opportunities for the Department of Economic Development and Tourism concluded that fuelwood has substantial potential to replace petroleum as a heating fuel in the NWT south of the treeline, but that government oil subsidies represent a major obstacle. This report indicated that full conversion to fuelwood in the Mackenzie region could create 1000 jobs annually and result in annual energy cost savings of $17 million.

Conversion to woodheat, however, has environmental consequences such as air pollution from woodsmoke. In addition, the slow-growing forests of the NWT could be overharvested unless the industry is carefully managed. Harvesting could also adversely affect wildlife and the local and domestic economies dependent on wildlife. A fuelwood conversion program would clearly need to be carefully studied for its long-term environmental as well as its economic impacts.

Energy conservation has been recognized as the best way to lower the costs of supplying energy to the NWT. Energy conservation activities can themselves create business and employment opportunities. But the relatively low cost of oil to the consumer discourages the installation of adequate insulation in homes and offices, improvement of furnace maintenance and better consumer habits (turning off lights, closing doors and windows).

To achieve the goals of sustainable development, economic strategies such as oil subsidies or woodheat conversion programs should be assessed in terms of their future as well as immediate environmental costs and benefits. Similarly, the impact on other development strategies that use the same or associated natural resources should be assessed. A sustainable development approach to evaluating these issues involves an assessment of the implications for all resource sectors (since they are inter-related and inter-dependent) as well as for community and general environmental priorities.

2. Employ Cross-sectoral Approaches to Overcome Institutional Obstacles

To achieve sustainability, government departments and agencies must take a cross-sectoral approach and cooperate and communicate closely. For example, the Department of Economic Development and Tourism must identify environmentally sound business opportunities to maximize the long-term environmental and economic benefits. The Department of Renewable Resources must assist in identifying these opportunities and assessing their environmental impacts. The goals of sustainable development can only be achieved to the extent that obstacles to communications and cooperation are overcome.

The importance of developing cross-sectoral approaches to resource development is illustrated by the following examples for the mining, tourism and wildlife sectors, drawn from a study on sustainable development for the Yukon. Questions are used to indicate the scope of a policy review or assessment that would support the goals of sustainable development.

In considering the sustainability of proposed mining policies and projects, the following types of questions arise:

Do local or regional communities get any spin-off benefits, such as employment in the mine or supporting service industries? If not, why not?

Is the type of mining activity supported by the policy compatible with environmental constraints (wildlife breeding activities, watershed)?

Can the type of mining involved meet strict environmental standards--zero discharge or avoidance of water pollution, habitat contamination? Is there any incentive to do more than the minimum required?

Does the policy encourage the use or development of new energy efficient or environmentally safe technologies? How could incentives help?

Does the GNWT collect sufficient revenues? What associated costs are involved (construction of roads)?

What are the related long-term environmental costs (maintenance of roads, tailings ponds)? Is the legislation adequate? Can the GNWT implement a "polluter pays" principle?

How will this policy, or these activities, affect other economies necessary for community self-sufficiency (domestic economy or tourist developments)?

For tourist developments, questions such as the following are appropriate:

How will the development of the tourist industry affect the communities involved? Will the communities be overwhelmed by the influx of strangers?

What spin-off benefits will the individual communities get? How much increased revenue and employment will likely result?

Are local environmental, cultural and heritage features adequately protected?

Would the tourist activity complement other activities or does it displace them and create a new dependency? How is the domestic economy affected?

Will the activities be adequately monitored so that changes can be made if any damage is sustained by the environment or the community.

Similar questions apply to commercial wildlife harvesting (game ranching, country food exports). Questions include:

Is there enough wildlife available of adequate quality? What are the environmental impacts of increased populations on the habitat and other wildlife?

How reliable is the market? (How vulnerable is the activity to boycotts by animal-rights movements?)

Will the commercialization of harvesting or processing create a new dependency?

How will the commercial activity affect the community involved? Will the commercial activities undermine the domestic economy?

Increased communication between such departments as Department of Renewable Resources, Energy, Mines and Petroleum Resources, and Economic Development and Tourism is essential if questions such as those posed are to be answered. Many issues will also require the involvement of municipal planners (types of community resources available), transporta-

tion authorities (plans for roads, ports, airstrips) and health authorities (public health services, health education). In addition, the direct participation of land claims beneficiaries in resource management makes it critical to include representatives of these groups in all of these cooperative efforts.

An integrated approach also increases the potential for more efficient uses of limited government resources by identifying and creating opportunities for meeting a variety of departmental goals with one program. For instance, supporting energy conservation can save fuel dollars, reduce pollution, create new business opportunities and foster the development of environmentally sound technologies.

Involving industry and environmental advocates is also key to developing a comprehensive assessment of the merits of a development strategy, policy or program proposal. The Task Force on Environment and Economy advocated the establishment of "Round Tables" in each province and territory as a cooperative approach among representatives of government, industry and the environmental community to identify sustainable approaches to development. To date, Round Tables have been formed in Manitoba, Ontario, Quebec, New Brunswick and Nova Scotia and at the federal level.

3. Obtaining the Best Information

Good, timely information about the environmental implications of proposed policies, programs and projects is necessary if government decisions are to achieve sustainable development goals.

In the NWT, the federal, territorial and aboriginal environmental assessment activities provide decision-makers with information on the probable impacts of specific projects. There is now growing interest in using this approach to provide decision-makers with information about proposed government policies and programs. The recently established federal cabinet committee on the environment presumably will make use of environmental assessment information in examining environmental impacts of federal policies and programs.

Similarly, systematic and regular auditing of department policies and programs for their environmental implications is being advocated at the federal level. These "environmental audits" would be similar to financial auditing. Such audits would provide governments and the public with timely information on the usefulness of government initiatives.

Independent, objective assessments of the environmental implications of government policies and programs are often difficult to obtain. In New Zealand, the Parliamentary Commissioner for the Environment provides just this information. Appointed by and reporting to the New Zealand Parliament, the Parliamentary Commissioner investigates and evaluates the environmental significance of government policies, practices and projects. Parliament can direct the Parliamentary Commissioner to conduct specific investigations as it sees fit.

Other approaches are being employed to ensure that policy-makers have the right information upon which to base natural resource development policies and programs. These include use of new data banks and inventories.

Up-to-date and accurate inventories of natural resources, such as key wildlife species, are useful in preparing economic development strategies, and deciding on harvest levels. To these ends, the GNWT is conducting and participating in remote sensing surveys to identify nesting and staging areas of shorebirds in the outer Mackenzie River Delta, develop forest inventories for Fort McPherson and the Mackenzie Delta and study musk-ox habitat on Banks Island.

At the federal level, new information sources are being developed. One is state of the environment (SOE) reporting, which aims to improve the understanding of the interactions between human activities and the environment. The first state of the environment report was published by Environment Canada and Statistics Canada in 1986, with a follow-up report now in progress.

Drawing on appropriate data bases allows resource managers to determine whether a resource is being overharvested and what a community's future needs might be. Such factors can be taken into account in the same way that economists use information such as fiscal deficits in the government's financial accounts to forecast economic trends.

Environmental information is also required to measure the progress towards sustainable development over time. Many environmental economists are examining ways to include natural resource assets in national (or territorial) income and expenditure accounting (such as computing the gross national product). For example, if the forests of the NWT are being overharvested, there is a deficit in the natural assets account. But current economic models have no way to express and accommodate this deficit.

To restate the point, man-made assets such as buildings are valued as productive assets and are written off against the value of production as they depreciate. However, natural resource assets are not so valued and their loss therefore entails no charge in the accounts against current income that would reflect the decrease in potential future production.

Statistics Canada has developed a data base that provides a framework for examining all aspects of resource use. This data base is called the Socio-Economic Resource Framework (SERF) and includes data on how different resources (forests, wildlife, fisheries stocks) fare from year to year (natural resource accounts), as well as considerations of demography (population, households, labour force), consumption patterns, transportation options, infrastructure and manufacturing capacities.

To conclude, information about natural resources and the environment is essential to ensure that decision-makers make sound decisions about government policies, programs and specific development projects. And it is also necessary to quantitatively measure sustainable development to enable governments and industry to make useful economic forecasts.

4. Respect Community Interests and Priorities

Decision-making about appropriate development goals, policies, programs and legislation must respect community interests and priorities to ensure long-term benefits to local communtities. Data bases such as those described above are useful but they are no substitute for the insights and knowledge of those who live with the resources concerned--who know from experience the impact of mining exploration on caribou movements and the flooding of seal dens from ships passing by. Because local people are most deeply affected by the consequences of development project decisions, their concerns should be carefully considered in creating development priorities.

Long-term economic planning, then, must be done within a framework of community and regional goals. The wide geographic and cultural variation in the North makes this an especially important consideration for the GNWT. A sustainable development strategy for one area of the NWT may be different from what it is in another--one community may only achieve some degree of self-sufficiency from oil and gas activity, for another this may undermine a healthy domestic economy which only has a limited need for wage-generating activities.

These considerations apply directly to the decisions about the type, scale and timing of resource development projects and is reflected in the small-scale phased development approach advocated for Lancaster Sound. Decisions on such matters must address priorities such as:

- needs for revenues for everything from guns, food and fuel to improved community services;
- employment and educational opportunities for community residents, especially youth;
- preservation of cultural traditions and skills; and
- environmental constraints.

The legacy of community involvement in environmental assessment hearings, business development initiatives, community committees, land use planning exercises and land claim settlement negotiations and management boards uniquely prepares the northern public for an active role in the decision-making process. Support of this role through public education, however, is needed on a continuing basis to allow maximum participation of residents.

Conclusion

Seeking to achieve sustainable development is an opportunity for Northerners to create long-term economic options that meet future as well as present needs. But this can only be achieved by increased government responsiveness to concerns of different government departments and institutions, communities, industry and environmental advocates.

III. STRATEGIES
FOR THE
SPECIAL COMMITTEE
ON THE
NORTHERN ECONOMY

III. STRATEGIES FOR THE SPECIAL COMMITTEE ON THE NORTHERN ECONOMY

The first two chapters have identified some of the constraints and limitations facing the GNWT in planning for natural resource development as well as the goals, principles and institutional implications of a sustainable approach to resource development. This chapter sets out four main strategies for applying this approach:

- supporting current initiatives;
- creating incentives;
- integrating management; and
- keeping watch.

To restate an earlier point, any NWT economic development strategy will have limited impact because international forces, such as commodity markets, have a powerful influence on the NWT's marginal resource-based economy. For this reason, planning becomes even more important for those aspects of the northern economy over which the GNWT does have control or influence.

The sustainable development approach has the potential to address some fundamental challenges to long-term economic development in the NWT, by:

- responding to the growing needs of an increasing population by recognizing the need for economic development;
- respecting environmental constraints;
- supporting community and regional development goals;
- providing a coherent framework for coordinating GNWT involvement in resource development; and
- clarifying GNWT priorities for industry as well as other resource management authorities.

The sustainable development approach has already received much support from regional and aboriginal organizations of the NWT. One important objective of a long-term economic development strategy could be to advance this process still further.

Therefore, the Special Committee on the Northern Economy should:

1. Adopt the goals and principles of sustainable development and incorporate these goals and principles into the Committee's long-term economic development strategy.

SUPPORTING CURRENT INITIATIVES

Sustainable development is being advocated and implemented in various ways in the NWT; the Special Committee should recognize and promote such efforts. These initiatives include the preparation by the GNWT of a sustainable development policy and the Lancaster Sound Proposed Regional Land Use Plan. The federal government is supporting this approach and may apply it more vigoursly to federal policies and programs in the future.

A number of conservation strategies that support sustainable development goals and focus on the NWT have also already been developed. These include the Arctic Marine Conservation Strategy, the Inuit Regional Conservation Strategy, and the Inuvialuit Renewable Resource Conservation and Management Plan. Aboriginal organizations with close links to the NWT, such as Indigenous Survival International and Inuit Circumpolar Conference, are working at the international level to prepare a second version of the World Conservation Strategy that will incorporate aboriginal approaches to conservation. In addition, the land claims agreements at least implicitly recognize and support the goals of sustainability.

The Special Committee should:

2. Support the implementation of existing sectoral and regional conservation strategies in the NWT and the development of new such strategies.

In addition, the GNWT is actively considering the appointment of a territorial Round Table on environment and economy as recommended by the National Task Force on Environment and Economy. These Round Tables provide a forum for bringing together stakeholders (representatives of different business sectors as well as governments, aboriginal organizations and the environmental community) to cooperate on sustainable development issues and to identify concerns and opportunities.

The Special Committee should:

3. Recommend the early appointment of the GNWT Round Table on environment and economy.

Business and industry associations are taking their own initiatives. The Business Council on National Issues and the Canadian Chamber of Commerce have created environment /economy task forces. The Canadian Petroleum Association has prepared an environmental code of practice and the Canadian Mining Association is working on the MEND program to reduce acid mine drainage. These and similar initiatives by northern industry associations deserve GNWT support.

The Special Committee should:

4. Support business and industry initiatives that further sustainable development goals and principles.

CREATING INCENTIVES

Subsidies to communities, such as the petroleum subsidy mentioned earlier, and indirect subsidies through tax credits strongly influence the achievement of a sustainable economy. Positive incentives (tax credits, business development grants) can be introduced to encourage sustainable practices by industry and communities (use of energy-efficient and environmentally sound technologies, development of environmentally sound business opportunities, such as recycling or energy conservation projects). Disincentives (fines, loss of permits or licences) can be legislated to discourage unsustainable practices (discharges of contaminants, overharvesting).

Before such a program of appropriate incentives can be created, the GNWT must undertake a comprehensive review of existing financial and taxation incentives to identify those that inhibit and those that promote sustainable development. While recognizing that subsidies are provided for reasons other than sustainable development (stabilizing an industry, reducing certain costs to communities, creating jobs) incentives that encourage unsustainable practices should be eliminated over time.

Similarly, incentives that support sustainable development should be developed. The protection of harvesting rights under land claims agreements is a form of economic incentive. GNWT programs to support hunters and trappers on the land probably also qualify as sustainable economic incentives.

Since the NWT economy is closely tied to government activities, the GNWT must also review its own use of natural resources, goods and services to determine if the government itself is a model of sustainable approaches. Review of the GNWT's patterns of energy consumption, and procurement and waste management policies, followed by any required changes, would establish the GNWT's leadership role in sustainable development. For example, GNWT buildings should be energy-efficient and GNWT departments should reuse and recycle wherever possible.

The Special Committee should:

5. Recommend that the GNWT conduct a comprehensive review of all incentives programs (internal and external) that affect natural resource development in the NWT for compatibility with sustainable development goals.

6. Recommend that following such a review, the GNWT support elimination of incentives identified as inhibiting sustainable development and/or replacement with incentives supporting sustainable development.

7. Recommend that the GNWT systematically encourage industry and other natural resource users to adopt sustainable practices through incentives and discourage unsustainable practices through disincentives.

8. Recommend that the GNWT review its internal procurement and energy and waste managment policies for compatibility with sustainable development goals and principles.

INTEGRATING MANAGEMENT

Sustainable development challenges government institutions to adopt cross-sectoral approaches and increase communication and coordination between departments and agencies. A strategy for the development of the tourism industry is not just about hunting and fishing lodges, but also wildlife management. An energy policy affects environmental quality as well as job creation and territorial self-sufficiency in energy.

To meet these challenges for institutions, at least two main gaps must be filled. One is that GNWT departments must have common sustainable development goals to support cross-sectoral appoaches to policy development and increased coordination and communication. The progress of GNWT departments and agencies in achieving sustainable development can then be measured against these stated departmental goals.

There is also need for a central agency to ensure that GNWT departments are working together. The Deputy Minister of the Executive Council, who heads a key central agency of the NWT, should have a mandate and authority to ensure that legislative, policy and program initiatives proposed by GNWT departments are consistent with sustainable development goals. Such authority would assist greatly in integrating management to the extent necessary to achieve sustainable development.

The Special Committee should:

9. Recommend that the mandates of all departments include sustainable development goals and that each department periodically evaluate its progress in achieving sustainable development against these stated goals.

10. Recommend that the Deputy Minister of Executive Council be directed to ensure that all economic policy and program initiatives and related legislation submitted to the Executive Council for decision are consistent with sustainable development goals and that consideration be given to establishing a small secretariat reporting to the Deputy Minister of the Executive Council to perform this role.

Sustainable development of natural resources requires accurate and timely information about environmental impacts, costs and benefits. The GNWT should continue to develop access to information (natural resource inventories, community impact studies, project and technology evaluations) relevant to assessment of environmental impacts of proposals before the GNWT and other authorities, such as the joint management boards and councils. In addition, this information should eventually be integrated into territorial economic accounts to provide better information about the state of the NWT economy.

The Special Committee should:

11. Recommend that the GNWT develop a comprehensive northern-based environmental information system designed to assist the GNWT and other decision-makers in the NWT assess the sustainability of resource development policies, programs and projects.

The GNWT is making efforts to assist resource industries by streamlining regulatory and information requirements through consultations with the federal government, aboriginal groups and industry. Once defined, such a coordinating function would clarify requirements for industry and enhance the GNWT's role in resource managment in the NWT.

The Special Committee should:

12. Support the further development of the GNWT's role as coordinator of resource development and environmental protection regulatory and information requirements for the NWT.

KEEPING WATCH

Sustainable development requires long-term government commitment. Governments are subject to many short-term pressures, both economic and political, and thus may be tempted to lose sight of goals such as sustainable development whose rewards extend beyond the life of a government. Institutional measures that ensure accountability are helpful in reinforcing a long-term committment to sustainable development.

Accountability can be advanced in several ways. Natural resource development actitivities of the GNWT could be assessed or audited internally by government itself. Environmental auditors could monitor and periodically evaluate government programs and policies for compatibility with GNWT sustainable development goals, just as financial auditors review financial management practices.

The Special Committee should:

13. Recommend that an environmental auditing system similar in principle to existing financial auditing systems be established within the GNWT.

Accountability to the public for sustainable development can perhaps best be achieved through the Northwest Territories Legislative Assembly. An Environmental Advisor, appointed by and reporting to the Legislative Assembly, would be able to provide independent and objective advice to members of the Legislative Assembly (and thus the public) on the compatibility of government policies and programs with sustainable development goals.

Establishing such an Environmental Advisor position would enhance public accountability within the GNWT but also that of other public agencies within the NWT. In this respect, the federal Auditor-General serves as a possible model.

The Environmental Advisor would have limited resources and would need to be selective in identifying projects for review. The Advisor would be empowered to conduct environmental reviews of existing or proposed natural resource development policies, programs or projects in the NWT, and investigate and report to the Legislative Assembly on achievement of sustainable development goals by the GNWT.

The Special Committee should:

14. Recommend that the GNWT enact legislation authorizing the Legislative Assembly to appoint an Environmental Advisor to report directly to the Legislative Assembly to ensure public accountability for the management of natural resources and protection of the environment within the NWT.

For accountability measures to be effective, the public must be knowledgeable about the GNWT's role in advancing a sustainable economy. Public education programs are valuable to ensure broad understanding of sustainable practices, such as energy conservation and waste reduction, reuse and recycling methods. Public education on sustainable development would also support the development of community and regional expertise in monitoring environmental quality and determining sound development goals.

The Special Committee should:

15. Recommend that the GNWT develop public education programs respecting the goals and practices of sustainable development.

SUMMARY OF RECOMMENDATIONS

The Special Committee on the Northern Economy should:

1. Adopt the goals and principles of sustainable development and incorporate these goals and principles into the Committee's long-term economic development strategy.

2. Support the implementation of existing sectoral and regional conservation strategies in the NWT and the development of new such strategies.

3. Recommend the early appointment of the GNWT Round Table on environment and economy.

4. Support business and industry initiatives that further sustainable development goals and principles.

5. Recomend that the GNWT conduct a comprehensive review of all incentives programs (internal and external) that affect natural resource development in the NWT for compatibility with sustainable development goals.

6. Recommend that following such a review, the GNWT support elimination of incentives identified as inhibiting sustainable development and/or replacement with incentives supporting sustainable development.

7. Recommend that the GNWT systematically encourage industry and other natural resource users to adopt sustainable practices through incentives and discourage unsustainable practices through disincentives.

8. Recommend that the GNWT review its internal procurement and energy and waste management policies for compatibility with sustainable development goals and principles.

9. Recommend that the mandates of all departments include sustainable development goals and that each department periodically evaluate its progress in ahieving sustainable development against these stated goals.

10. Recommend that the Deputy Minister of Executive Council be directed to ensure that all economic policy and program initiatives and related legislation submitted to the Executive Council for decision are consistent with sustainable development goals and that consideration be given to establishing a small secretariat reporting to the Deputy Minister of the Executive Council to perform this role.

11. Recommend that the GNWT develop a comprehensive northern-based environmental information system designed to assist the GNWT and other decision-makers in the NWT assess the sustainability of resource development policies, programs and projects.

12. Support the further development of the GNWT's role as coordinator of resource development and environmental protection regulatory and information requirements for the NWT.

13. Recommend that an environmental auditing system similar in principle to existing financial auditing systems be established within the GNWT.

14. Recommend that the GNWT enact legislation authorizing the Legislative Assembly to appoint an Environmental Advisor to report directly to the Legislative Assembly to ensure public accountability for the management of natural resources and protection of the environment within the NWT.

15. Recommend that the GNWT develop public education programs respecting the goals and practices of sustainable development.

APPENDICES

APPENDIX A: TERMS OF REFERENCE

(As revised February, 1989)

RESOURCE DEVELOPMENT AND THE ENVIRONMENT:
IN SEARCH OF A NEW VISION

Background

In developing its long term economic strategy, the Special Committee On the Northern Economy realizes it must come to grips with the following question:

> How can we develop our natural resources, and do it a way that will preserve and develop our most important natural resource -- the environment?

It is not a new question. Northerners have been wrestling with it for decades. Unfortunately, we have not yet come up with a satisfactory answer.

Why not? Because we have not been able to break through the various vested interests to find a common ground for discussion and planning.

Different groups have differing points of view on how our natural should or should not be developed. Often these groups find themselves pitted against one another, vying for political leverage, or trying to manipulate a cumbersome regulatory regime. The result is usually some kind of compromise: no clear winners, no clear losers, and a great deal of dissatisfaction.

We need a better approach, one that starts from a common basis of understanding about the relationship between the development of the natural resources and the protection of the environment.

In recent years environmentalists and economists, working together, have developed the concept of SUSTAINABLE DEVELOPMENT. It seems to provide a set of principles that we can use to develop a strategic approach to resource development.

Objective

> To outline a strategy for resource development in the Northwest Territories based upon the concept of sustainable development.

Specific Objectives

1. To describe and assess the present approach to resource development and environmental protection, based upon regulatory regimes and the advocacy system.

2. To describe the concept of sustainable development; to outline a strategy for resource development based upon this concept.

3. To outline the major issues involved in moving from the traditional approach to a new strategy based upon the principles of sustainable development.

4. To describe the role that the GNWT might play in effecting this transition.

Scope

This study will include:

- a description of the traditional approach; major players, conflicting visions, mandates, regulatory process and regimes (briefly);

- outline of impending changes resulting from devolution, land claims and other factors of significance (e.g. new legislation, streamlining of procedures)--to the extent that these changes can be anticipated;

- description of the concept of sustainable development: origins, relevance, relationship between sustainable development and economic development;

- a proposed strategy based upon a set of guiding principles which deal with both the development of the economy and the protection of the environment.

APPENDIX B: SELECTED BIBLIOGRAPHY

Chapter I - Sources

Aird, Rebecca. "Role of the Government of the Northwest Territories in Territorial Economic Development". In Running the North: The Getting and Spending of Public Finances by Canada's Territorial Governments. Edited by Rebecca Aird. Ottawa: Canadian Arctic Resources Committee, 1989. pp. 253 - 336.

Ames, Randy., et al. *Keeping on the Land - A Study of the Feasibility of a Comprehensive Wildlife Harvest Support Programme in the Northwest Territories.* Ottawa: Canadian Arctic Resources Committee, 1989.

Berger, Thomas R. *Northern Frontier, Northern Homeland, The Report of the Mackenzie Valley Pipeline Inquiry: Volume One*. Ottawa: Supply and Services Canada, 1977.

Boychuk, Rick. "PCB-tainted breast milk is a problem for all Arctic mothers: scientist." *The Gazette,* Montreal, February 10, 1989, p.A-4

Canada. Department of Indian and Northern Affairs and Government of the Northwest Territories. *Northern Accord Agreement in Principle*. September, 1988.

-----. Department of Indian Affairs and Northern Development and the Committee for Original Peoples' Entitlement. *The Western Arctic Claim, The Inuvialuit Final Agreement.* Ottawa: Indian Affairs and Northern Development, 1984.

-----. Department of Indian and Northern Affairs and the Dene Nation and the Metis Association of the Northwest Territories. *Dene/Metis Comprehensive Land Claim Agreement in Principle*. Ottawa: Indian Affairs and Northern Development, 1988.

-----. Department of Indian and Northern Affairs. *A Northern Political and Economic Framework*. Ottawa: Supply and Services Canada, 1988.

-----. *Northwest Territories Act*, R.S.C. 1985 c. N - 27

-----. Department of Indian and Northern Affairs."Beaufort Development". Internal notes, 1988.

Dene Nation and Metis Association of the Northwest Territories. "Devolution of Powers to the Government of the Northwest Territories: Provincehood and Aboriginal Self-Government". Submission to NWT Legislative Assembly, 1988.

Dimensions Planning Ltd. "An Assessment of the Impact of Regulatory Regimes on Oil and Gas Explorartion on Land North of 60o". Report submitted to Indian and Northern Affairs Canada, Calgary, 1986.

Everitt, Robert R., et al. "Environmental Assessment Processes in the Northwest Territories". Confidential Report submitted to Indian and Northern Affairs Canada and Renewable Resources, Government of the Northwest Territories, 1988.

Hunt, Constance D. "Northern Oil and Gas Agreements In Principle". *Resources,* 25 (Winter 1989): pp. 1 - 3.

Inuvialuit Regional Corporation. "Submission to the Legislative Assembly of the Northwest Territories on the Principle of Devolution". 1988.

Keeping, Janet. "Dene/Metis Agreement in Principle". *Resources*, 25 (Winter 1989): pp. 4-6.

Keewatin Chamber of Commerce. "Business Initiatives for the 90s". Position paper, 1988.

Keith, Robert F. and David A. Neufeld. "Northern Resources Planning and Management: Perspectives on Community Self-determination". In Northern Communities: The Prospects for Empowerment. Edited By Gurston Dacks and Ken Coates. Edmontom: Boreal Institute for Northern Studies, 1988.

Lancaster Sound Regional Land Use Planning Commission. *The Lancaster Sound Proposed Regional Land Use Plan*. Pond Inlet, NWT: Lancaster Sound Regional Land Use Planning Commission, 1989.

Mackenzie Delta-Beaufort Sea Regional Land Use Planning Commission. *Newsletter,* No. 3 (December 1988).

MacKinnon, Dan. *A Compendium of the Northern Regulatory Regime.* Canada: CCH Canadian Limited, 1986.

Matthews, Stephen B. and Robert M. Larson. *An Evaluation of the Norman Wells Project.* Department of Renewable Resources by the Government of the Northwest Territories, 1987.

Maxwell, Barrie. "Atmospheric and Climate Change in the Canadian Arctic, Causes, Effects, and Impacts." *Northern Perspectives*, 15, 5 (December 1987): 2-4.

Mining Association of Canada. "Economic Renewal and Canadian Mining". Submission to the Government of Canada. January, 1985.

National Symposium on the North. *Changing Times, Challenging Agendas, Economic and Political Issues in Canada's North*. Ottawa: Canadian Arctic Resources Committee, 1988.

Newman, Peter C. *Renegade in Power: The Diefenbaker Years*. Toronto: McClelland and Stewart Limited, 1963.

Northwest Territories. Bureau of Statistics. 1981, 1986 Census, 1987 Estimates by Region and Community.

-----. *Environmental Protection Act* (Proposed). Tabled on November 7, 1988.

-----. *61.00 Establishment Policy, Economic Development and Tourism.* November 9, 1988.

-----. Department of Local Government. "Lands Manual", 1974.

-----. " Department of Renewable Resources, Government of the Northwest Territories, Strategic Plan 1988 - 1991". 1988.

-----. *Direction for the 1990s.* Government of the Northwest Territories, 1988.

-----. Economic Development and Tourism. *1988 NWT Economic Review and Outlook.* Government of the Northwest Territories, 1988.

-----. "Environmental Protection in the Northwest Territories". Policy discussion paper, Department of Renewable Resources, Government of the Northwest Territories, 1988.

-----. "Political and Constitutional Development in the Northwest Territories". Discussion Paper tabled in NWT Legislative Assembly. 1988.

-----. *Resource Development Policy*. Government of the Northwest Territories, 1982.

-----. *Renewable Resource Compensation Policy.* Government of the Northwest Territories, 1984.

N.W.T. Chamber of Mines. "A Brief Presented to the Office of Regulatory Reform at the hearings in Yellowknife, NWT, April 24, 1985".

Speer, Lisa and Sue Libenson. *Oil in the Arctic: The Environmental Record of Oil Development on Alaska's North Slope* (Executive Summary). Natural Resources Defense Council, Inc., 1988

Tungavik Federation of Nunavut. "Inuit will share benefits of development. *Nunavut*, 5, 2 (February 1986): 3 -4.

-----. "Development Impact: Screening and Review." *Nunavut*, advance copy (March, 1989)

Roe, Nicholas A., et al. *The Bent Horn Project: Evaluation of the Environmental Regulatory Process*. Renewable Resources, Government of the Northwest Territories, 1987.

Yukon. Executive Council Office. *The Caribou are Our Life.* Whitehorse: Government of the Yukon, 1988.

Chapter II - Sources

Bastedo, Jamie. "Framework for a Northwest Territories Conservation Strategy." *Conservation Strategies in Canada*. CSEB Newsletter/Bulletin 44, 2 (July, 1987): pp. 47 - 55.

Canada. Fisheries and Oceans Canada. *Canadian Arctic Marine Conservation Strategy*. Ottawa: Supply and Services, 1987.

-----. Energy, Mines and Resources. *Energy and Canadians into the 21st Century*. Ottawa: Supply and Services, 1988.

-----. Statistics Canada & Faculty of Environmental Studies, University of Waterloo. "SERF - Overview". Information Kit.

-----. Statistics Canada. "SERF Conceptual Hierarchy". Poster.

-----. Environment Canada. *State-of-the-Environment Reporting*. No. 1, October - December 1987 and No. 2 August 1988.

Canadian Petroleum Association. *Environmental Code of Practice.*

Hughes, Helen R., "New Zealand's Parliamentary Commssioner for the Environment". *Inter-Parliamentary Bulletin*, 1988, No.1, p.52 - 60.

Fenge, Terry. "A Review of the National Task Force Report on Environment and Economy". Draft, to be published in *Environments*.

Ference, Don & Associates Ltd. *Import Substitution Opportunities - Main Report*. Yellowknife: Economic Development and Tourism, Government of the Northwest Territories, 1987.

International Union for Conservation of Nature and Natural Resources. *World Conservation Strategy*. IUCN-UNEP-WWF, 1980.

Inuit Circumpolar Conference. *Report on Activities: Summer* 1986 - Summer 1988.

Keith, Robert F., and Mary Simon. "Sustainable Development in the Northern Circumpolar World" in *Conservation with Equity: Strategies for Sustainable Development*. Edited by Peter Jacobs and David A. Munro. Cambridge, U.K.: IUCN, 1987.

Lancaster Sound Regional Land Use Planning Commission. *The Lancaster Sound Proposed Regional Land Use Plan*. Pond Inlet, NWT: Lancaster Sound Regional Land Use Planning Commission, 1989.

Livingston, Ron and Dy Robb. "The Northwest Territories Context for Integrated Resource Management". Presentation to Northern Development Seminar, Banff Centre School of Management, February 23, 1987.

McNeely, Jeffrey A. *Economics and Biological Diversity: Developing and Using Economic Incentives to Conserve Biological Resources*. Gland, Switzerland: International Union for Conservation of Nature and Natural Resources, 1988.

Mining Association of Canada. "Environmental Research on Mine Wastes Announced." Communique, August 30, 1988.

National Task Force on Environment and Economy. *Report of the National Task Force on Environment and the Economy*. Submitted to the Canadian Council of Resource and Environment Ministers, September 24, 1987.

National Task Force on Environment and Economy. *Progress Report*. Submitted to the Canadian Council of Resource and Environment Ministers, October 1988.

Nicholls, Graham. "Energy Options For Northern Canada". Presentation to *Energy Options* Conference on Native and Northern Issues, Yellowknife, October 21, 1987.

Northwest Territories. Interdepartmental Working Group on Sustainable Development. "Northwest Territories Sustainable Development Policy - Draft" & Background documents.

-----. Canada-Territories Economic Development Agreements (Subsidiary Agreements).

Pelly, David F.. "Wildlife Boards must help ease impact of modern ways on communities, CMB member says." *Caribou News,* 8, 5, (February, 1989): p. 6.

Pretes Michael and Michael Robinson. "Permanent Trust Funds and Sustainable Non-Renewable Resource Management in the Canadian North". *Resources,* 25 (Winter 1989): pp.7 - 8.

Rawson Academy of Aquatic Science. *The Environmental Impacts of Government Policies*. Ottawa: The Canadian Environmental Assessment Research Council, 1988.

Remote Sensing in the Northwest Territories, 1, 2, (November 1988).

Rowe, Stan. "Implications of the Bruntland Commssion Report for Canadian Forest Management". *The Forestry Chronicle,* 65, 1, (February, 1989): pp. 5 - 7.

Task Force on Northern Conservation. *Report of the Task Force on Northern Conservation*. Ottawa: Department of Indian Affairs and Northern Development, 1984.

Wildlife Management Advisory Council (NWT) and Fisheries Joint Management Committee. *Inuvialuit Renewable Resource Conservation and Management Plan.* 1988.

World Commission on Environment and Development. *Our Common Future.* Oxford, U.K.: Oxford University Press, 1987.

Yukon Conservation Society. "Sustainable Development in the Yukon". Submission to Yukon 2000, June 30, 1987.

APPENDIX C: CONSULTATIONS

Representatives of the following organization and institutions provided valuable insights and documentary materials on the regulatory issues of resource development and environmental protection facing the GNWT and on the concept of sustainable development.

Canadian Arctic Resources Committee
Canadian Petroleum Association
Canadian Wildlife Federation
Dene/Metis Negotiating Secretariat
Ecology North
Metis Association of NWT
Mining Association of Canada
NWT Chamber of Mines
Tungavik Federation of Nunavut

GNWT, Bureau of Statistics
GNWT, Departmentof Economic Development and Tourism
GNWT, Department of Energy, Mines and Petroleum Resources
GNWT, Office of Devolution
GNWT, Department of Municipal and Community Affairs
GNWT, Department of Renewable Resources

Energy, Mines and Resources Canada
Environment Canada
Indian and Northern Affairs Canada
Statistics Canada

These consultations were conducted over the winter of 1988-1989 in Yellowknife, Calgary and Ottawa.

The Consultants would also like to thank François Bregha for his insights and comments on a draft of this report.